KFC
641.5
.P63
L39
1995

1995
LAWS AND REGULATIONS
STUDY GUIDE

FOR
AGRICULTURAL PEST CONTROL ADVISER
PEST CONTROL AIRCRAFT PILOT
PEST CONTROL BUSINESS
PEST CONTROL DEALER
QUALIFIED APPLICATOR CERTIFICATE
QUALIFIED APPLICATOR LICENSE
EXAMINATIONS

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE OF CALIFORNIA
DEPARTMENT OF PESTICIDE REGULATION
PESTICIDE ENFORCEMENT BRANCH
LICENSING AND CERTIFICATION PROGRAM
1020 N STREET, ROOM 300
SACRAMENTO, CALIFORNIA 95814-5624
(916) [redacted]
FAX - (916) [redacted]

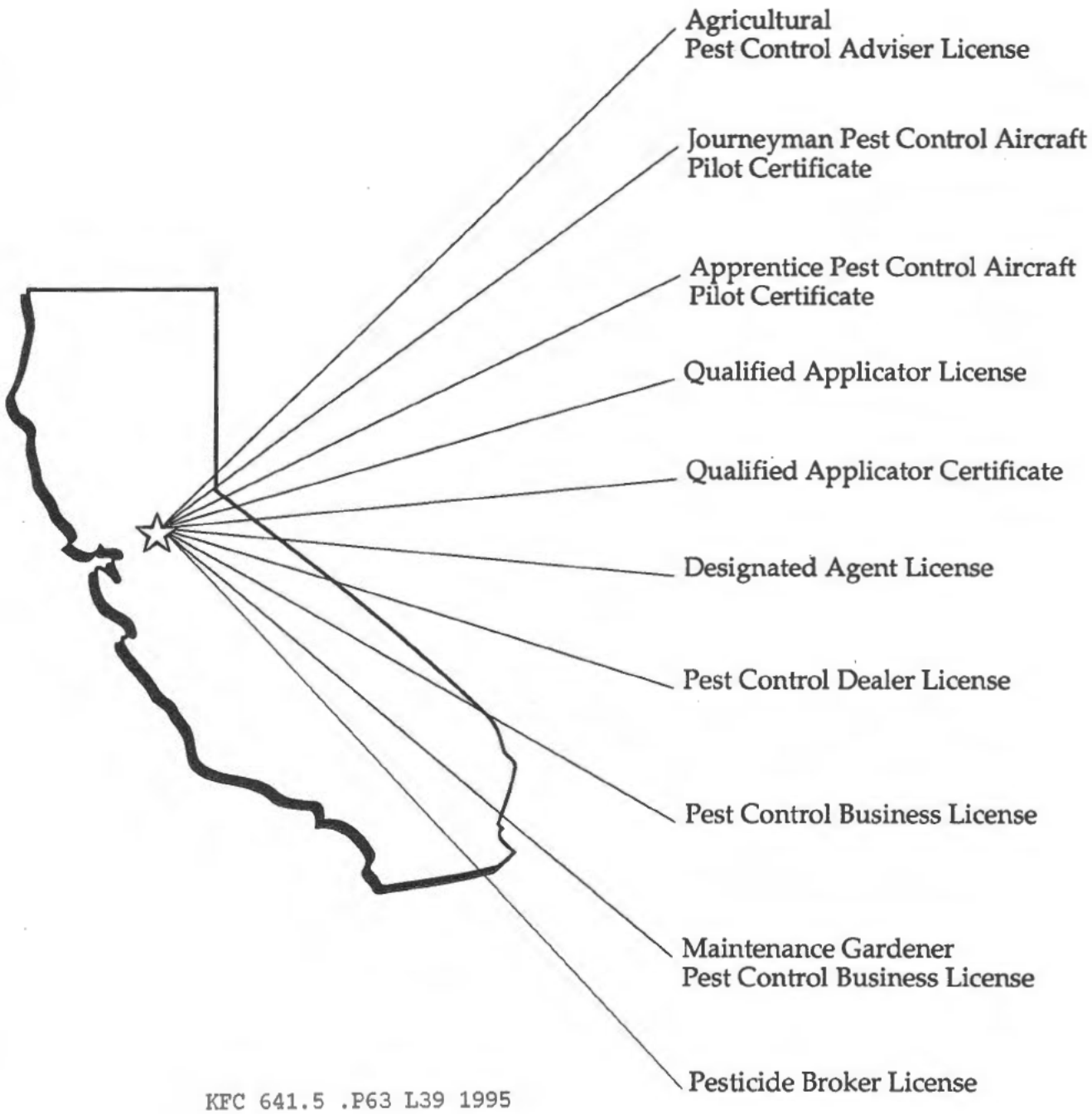
NOV 1995
DEPOSITORY
San Jose State
UNIVERSITY
DOCUMENTS

LIBRARY, SAN JOSE STATE UNIVERSITY

First Printing - November 1995

Licensing and Certification Program

State of California
Department of Pesticide Regulation
Pesticide Enforcement Branch



KFC 641.5 .P63 L39 1995

Laws and regulations study
guide for agricultural pest

PREFACE

On July 17, 1991, the Division of Pest Management, Environmental Monitoring and Worker Safety of the California Department of Food and Agriculture (CDFA) was moved into the newly formed California Environmental Protection Agency (Cal/EPA) by Governor Pete Wilson. The Division remained intact and became the Department of Pesticide Regulation (DPR). DPR is comprised of the following eight branches: Pesticide Enforcement, Pesticide Registration, Environmental Monitoring and Pest Management, Worker Health and Safety, Medical Toxicology, Information Systems, Audits, and Resources Management.

All regulatory authority for the enforcement of the laws and regulations pertaining to pesticides and pest control was transferred from CDFA to DPR. The laws are still entitled the Food and Agricultural Code. For the purpose of simplifying this Study Guide, these laws and regulations have been combined. However, if you wish, you may obtain a copy of the California Food and Agricultural Code, and a copy of Title 3 of the California Code of Regulations.

In addition to DPR, Cal/EPA is comprised of the Air Resources Board, Integrated Waste Management Board, State Water Resources Control Board, Department of Toxic Substances Control, and Office of Environmental Health Hazard Assessment. The creation of Cal/EPA fulfilled Governor Wilson's promise to consolidate all State environmental programs dealing with air, water, solid waste, pesticides, and toxic programs into a single point of accountability. The formation of Cal/EPA ensures that environmental protection has a Cabinet-level voice.

The Department of Pesticide Regulation has the primary responsibility for regulating all aspects of pesticide sales and use to protect the public health and the environment.

DPR's mission is to evaluate and mitigate impacts of pesticide use, maintain the safety of the pesticide workplace, ensure product effectiveness, and encourage the development and use of reduced risk pest control practices while recognizing the need for pest management in a healthy economy.

Contents

Chapter I:	**Introduction**	**I-1**
	Laws and Regulations	I-1
	Purpose of Pesticide and Pest Control Laws and Regulations	I-1
	Enforcement Agencies	I-2
	Enforcement Options	I-3
	Compliance Actions	I-8
	Structural Pest Control Suspensions and Civil Penalties	I-9
	Review Questions	I-10
Chapter II:	**Pesticide Registration**	**II-1**
	Obtaining Product Registration	II-1
	Licensing of the Product (Certificate of Registration)	II-3
	Amending the Registered Label	II-3
	Currently Registered Products	II-4
	Product No Longer Registered	II-4
	Special Local Need Registrations and Emergency Exemptions	II-4
	Research Authorizations	II-5
	Review Questions	II-6
Chapter III:	**Restricted Materials**	**III-1**
	Federally Restricted Use Pesticides	III-1
	California Restricted Materials	III-2
	Restricted Materials Permit	III-2
	Permit Evaluation	III-6
	Pest Control Dealer Responsibility	III-8
	Exempt Materials	III-8
	Permit Exemptions - Nonagricultural Use	III-9
	Other Permit Exemptions	III-10
	Refusal, Suspension, or Revocation of a Restricted Material Permit	III-10

	Supervision Standards for Certified Applicators	III-11
	Review Questions	III-12
Chapter IV:	**Pest Control Operations and Licensing**	**IV-1**
	Pest Control Business License	IV-1
	Maintenance Gardener Pest Control Business License	IV-6
	No Fee Pest Control Business License	IV-8
	Structural Pest Control Operator and Field Representative Licenses	IV-9
	Pest Control Dealer License	IV-11
	Pest Control Dealer Designated Agent License	IV-15
	Pesticide Broker License	IV-16
	Qualified Applicator License	IV-16
	Qualified Applicator Certificate	IV-17
	Aircraft Pilot's Pest Control Certificate	IV-19
	Agricultural Pest Control Adviser	IV-20
	Continued Education Information and Record Keeping Requirements for Licensee and Certificate Holders	IV-25
	Renewal of the License or Certificate	IV-26
	Applicator Responsibilities	IV-27
	Age Requirement	IV-28
	Protection of Persons, Animals, and Property	IV-28
	Conflict with Labeling (Illegal Pesticide Use)	IV-28
	Pesticide Labeling	IV-29
	Protection of Bees	IV-29
	Agricultural Pest Control Advisory Committee	IV-30
	Review Questions	IV-31
Chapter V:	**Pesticide Storage, Transportation, and Disposal**	**V-1**
	Pesticide Storage Requirements	V-1
	Pesticide Container Requirements	V-2
	Delivery and Transportation of Pesticides	V-2
	Container Rinsing and Disposal Requirements	V-3
	Review Questions	V-5
Chapter VI:	**Pesticide Worker Safety**	VI-1
	Hazard Communication Information for Employees	VI-1
	Employee Training Requirements	VI-1

	Employee Medical Requirements	VI-3
	Working Alone	VI-4
	Change and Washing Facilities	VI-4
	Work Clothing	VI-4
	Safety Equipment	VI-5
	Equipment Requirements	VI-7
	Closed Systems	VI-8
	Pesticide Safety Studies	VI-8
	Review Questions	VI-10
Chapter VII:	**Field Worker Safety**	**VII-1**
	Training Verification Program	VII-1
	Hazard Communication for Field Workers	VII-1
	Crop Sheets	VII-3
	Employer Responsibilities	VII-3
	Field Reentry After Pesticide Application	VII-4
	Warning and Posting Requirements	VII-7
	Review Questions	VII-12
Chapter VIII:	**Fumigation Worker Safety**	**VIII-1**
	General Fumigation Safe-Use Requirements	VIII-1
	Fumigation of Enclosed Spaces	VIII-1
	Field Fumigation	VIII-3
	Review Questions	VIII-4
Chapter IX:	**Pesticide Residue**	**IX-1**
	Monitoring Produce for Pesticide Residues	IX-1
	Residue Tolerances	IX-1
	Parts Per Million (PPM)	IX-2
	Tolerances for Combination of Pesticide Residues	IX-2
	Quarantine	IX-3
	Seizure	IX-3
	Commercial Laboratories	IX-3
	Review Questions	IX-4
Chapter X:	**Ground Water Protection and The Endangered Species Act**	**X-1**
	Chemicals on the Ground Water Protection List	X-1
	Pesticide Management Zone (PMZ)	X-2
	Ground Water Protection Restrictions	X-2
	Research Authorization for Ground Water Protection Chemicals	X-2

Dealer Requirements for Ground Water Protection Materials X-2
Requirements for Agricultural Pest Control Advisers X-3
The Endangered Species Act X-4
Review Questions X-5

Chapter XI: Minimal Exposure Pesticides XI-1
Minimal Exposure Pesticide Safety Use Requirements XI-1
Closed Systems XI-2
Respiratory Protection XI-3
Review Questions XI-4

Chapter XII: Mill Assessments and Product Quality XII-1
Mill Assessment XII-1
Pesticide Product Quality Enforcement XII-1
Review Questions XII-2

Appendix

Chapter I. Introduction

The State of California has many complex pesticide and pest control laws and regulations. Therefore, this Study Guide has been developed to help persons who may be involved with pesticides or pest control operations understand these laws and regulations by describing the roles and responsibilities of each of the licenses and certificates. The Pesticide Enforcement Branch, Licensing and Certification Program, is responsible for issuing the licenses and certificates to Pest Control Dealers, Agricultural Pest Control Advisers, Pest Control Businesses, Maintenance Gardener Pest Control Businesses, Pest Control Aircraft Pilots and Qualified Applicators.

This chapter will explain the purpose of laws and regulations, other agencies involved in cooperative enforcement with the Department of Pesticide Regulation (DPR), and options for enforcing the laws and regulations pertaining to pesticides and pest control operations.

Laws and Regulations

Laws are statutes passed by the California Legislature and signed by the Governor. Pesticide and pest control laws are found in the California Food and Agricultural Code.

Regulations are adopted by the Director of the Department of Pesticide Regulation after public hearings and approval by the Office of Administrative Law, and are filed with the Secretary of State. Regulations are designed to interpret and carry out the requirements of the law.

The county agricultural commissioner may adopt regulations applicable to his or her county which are supplemental to those of the Director which govern the conduct of pest control operations, and records and reports of those operations. Each regulation of a county agricultural commissioner must be approved by the Director before it becomes operative.

Purpose of Pesticide and Pest Control Laws and Regulations

The purpose of these laws and regulations, as set forth in the California Food and Agricultural Code, are:

1. To provide for the proper, safe, and efficient use of pesticides essential for the production of food and fiber, and for the protection of public health and safety.

2. To protect the environment from environmentally harmful pesticides by prohibiting,

regulating, or controlling uses of these pesticides.

3. To assure agricultural and pest control workers of safe working conditions where pesticides are present.

4. To permit pest control by competent and responsible licensees and permittees under strict control of the Director and the county agricultural commissioners.

5. To assure users that economic poisons (pesticides) are properly labeled and are appropriate for the use designated by the label.

6. To encourage the development and implementation of pest management systems, stressing the application of biological and cultural pest control techniques with selective pesticides, when necessary, to achieve acceptable levels of control with the least possible harm to nontarget organisms and the environment.

Enforcement Agencies

The **Director of the Department of Pesticide Regulation** and the **county agricultural commissioners** are responsible for regulating all aspects of pesticide sales and use, and to protect the public health and the environment. The county agricultural commissioners act under the direction and supervision of the Director. In any county that does not have a county agricultural commissioner, the Director acts as the agricultural commissioner. There are 54 county agricultural commissioners and 58 counties in California. The following combined counties each have one county agricultural commissioner in authority: Alpine/El Dorado; Inyo/Mono; Madera/Mariposa, and Plumas/Sierra.

Other State and federal agencies involved in cooperative enforcement with the Department and county agricultural commissioners are as follows:

U.S. Environmental Protection Agency (U.S. EPA). U.S. EPA is responsible for registering pesticides for specified uses on the basis of both safety and benefits before they are sold, held for sale, or distributed in commerce. U.S. EPA also oversees and reviews State and county regulatory programs funded by federal monies for compliance with federal requirements.

U.S. Food and Drug Administration (FDA). The FDA is responsible for enforcing pesticide residue tolerances on food shipped in interstate commerce. As part of these activities, FDA regulates levels of pesticide residues in domestically produced and imported foods and investigates pesticide residue incidents.

California Department of Fish and Game (DFG). The DFG cooperates in fish and wildlife loss investigations which may have been caused by pesticides.

California Department of Health Services (DHS). The DHS cooperates in pesticide illness investigations, development of worker safety regulations, licenses vector control techni-

cians, and assists in regulating local vector control agencies' use of pesticides.

State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCB). The State and Regional Boards implement and regulate programs such as underground containers, storage of hazardous waste, pesticide container disposal sites, and water quality standards to ensure contamination prevention, cleanup, and containment of hazardous materials.

Department of Toxic Substances Control (DTSC). The DTSC regulates hazardous waste management activities, cleans up contaminated sites, and supports the development of waste reduction, recycling, and treatment as alternatives to land disposal of hazardous waste.

California Air Resources Board (CARB). The CARB coordinates efforts to attain and maintain: ambient air quality standards; conducts research in the causes of air pollution, including pesticides in the air; and solutions to air pollution.

Office of Environmental Health Hazard Assessment (OEHHA). This Office is responsible for providing state and local agencies with scientific and technical expertise on the human health risk of chemicals in the environment through activities such as hazard identification, risk characterization, and standards recommendation.

Department of Industrial Relations (DIR), Division of Occupational Safety and Health. The DIR enforces the California Occupational Safety and Health Act (Cal-OSHA) and safety standards in pesticide formulation and manufacturing businesses.

Department of Industrial Relations (DIR), Division of Labor Standards Enforcement. This Division enforces the licensing of farm labor contractors. Farm labor contractors have to be knowledgeable in pesticides and pest control operations. This knowledge is necessary before contractors allow their employees into fields that have been treated, or will be treated, with pesticides.

University of California. The University is responsible for providing pest control research; provide pesticide and pest management seminars; conduct training programs such as "Train the Trainer"; and distributing training materials to growers, licensees, and certificate holders.

Department of Consumer Affairs, Structural Pest Control Board. The Structural Pest Control Board (SPCB) is responsible for issuing licenses to Structural Pest Control Operators and Field Representatives. The SPCB consists of seven members who are appointed by the Governor. The SPCB, subject to the approval by the Director of the Department of Consumer Affairs, adopts, amends, repeals, and enforces rules and regulations relating to the practice of structural pest control for hire.

Enforcement Options

In this portion of the chapter we will discuss Divisions 6 and 7 of the California Food and Agricultural Code. Division 6, entitled "Pest Control Operations," contains laws that cover

Pest Control Dealers, Agricultural Pest Control Advisers, Pest Control Businesses, Maintenance Gardener Pest Control Businesses, Pest Control Aircraft Pilots, and Qualified Applicators. Division 7, entitled "Agricultural Chemicals, Livestock Remedies, and Commercial Feeds," includes laws which cover produce carrying pesticide residue; economic poisons; restricted materials; environmentally harmful materials; pesticide brokers; Qualified Applicator Certificate holders; and structural pest control. The following enforcement options are summarized in ***Appendix I-1***.

Criminal Penalties. Any person who fails to comply with California's pesticide and pest control laws and regulations is guilty of a misdemeanor. A misdemeanor is an offense of the law which is of lesser gravity than a felony.

If a person is convicted of a misdemeanor for violation of a provision in Division 6, Pest Control Operations, or any regulation issued pursuant to a provision of this Division, he/she shall be punished by a fine of not less than five hundred dollars ($500.00) nor more than five thousand dollars ($5,000.00), or by imprisonment of not less than ten days nor more than six months, or by both fine and imprisonment. Each violation constitutes a separate offense.

If a person is convicted of a misdemeanor for a violation of any provision of Division 7, Agricultural Chemicals, Livestock Remedies, and Commercial Feeds, or any regulation issued pursuant to a provision of this Division relating to pesticides, he/she shall be punished by a fine of not less than five hundred dollars ($500.00) nor more than five thousand dollars ($5,000.00), or by imprisonment of not more than six months, or by both fine and imprisonment. Upon a second or subsequent conviction of the same provision of this division relating to pesticides, a person shall be punished by a fine of not less than one thousand dollars ($1,000.00) nor more than ten thousand dollars ($10,000.00), or by imprisonment of not more than six months, or by both fine and imprisonment. Each violation constitutes a separate offense.

If a person is convicted of an intentional or negligent violation which created, or could have created, a hazard to human health or the environment, the convicted person can be punished by imprisonment in the county jail not exceeding one year or in the State prison or by a fine of not less than five thousand dollars ($5,000.00) nor more than fifty thousand dollars ($50,000.00), or by both the fine and imprisonment.

Civil Penalties. In lieu of seeking criminal prosecution of a person for any violation of Division 6 or 7, the Director may prosecute civilly.

Any person who violates any provision of Division 6, or any regulation issued pursuant to a provision of this Division, shall be liable civilly in an amount not less than one thousand dollars ($1,000.00) nor more than ten thousand dollars ($10,000.00) for each violation.

Any person who violates any provision of Division 7, or any regulation issued pursuant to this Division relating to pesticides, shall be liable civilly in the amount not less than one thousand dollars ($1,000.00) nor more than ten thousand dollars ($10,000.00) for each violation.

Any person who commits a second or subsequent violation that is the same as a prior violation or similar to a prior violation, or whose intentional violation resulted or reasonably could have resulted, in the creation of a hazard to human health or the environment, or in the disruption of the market of the crop or commodity involved, is liable civilly in an amount not less than five thousand dollars ($5,000.00) nor more than twenty-five thousand dollars ($25,000.00) for each violation.

Administrative Actions. The Director may refuse to grant, revoke, or suspend any license or certificate if the applicant, licensee, or certificate holder violates, or has violated, specific provisions of the Food and Agricultural Code. *If denied or revoked, the applicant, licensee, or certificate holder may not reapply for the same type of license or certificate for a period of three years from the date of the denial or revocation.*

The county registration of a Pest Control Business, Pest Control Aircraft Pilot, or Agricultural Pest Control Adviser may be refused, revoked, or suspended by the county agricultural commissioner, if he/she finds any of the following:

Pest Control Business

1. The pest control equipment is unsuitable;

2. The applicator is incompetent or unqualified;

3. The applicator has not complied with any of the provisions of Division 6 or 7 pertaining to pesticides or with regulations adopted pursuant to the provisions, or any lawful order of the county agricultural commissioner.

Pest Control Aircraft Pilot

1. The pilot is not qualified to conduct the pest control operations in accordance with the pilot certificate;

2. The pilot does not hold an appropriate and valid commercial pilot's certificate and a current appropriate medical certificate issued by the Federal Aviation Administration;

3. The pilot has violated any provisions of Division 6 or 7 pertaining to pesticides or any regulation adopted pursuant to these provisions, or any regulation of an agricultural commissioner or any industrial safety order of the Department of Industrial Relations, or has not complied with any order of the Director or commissioner.

Agricultural Pest Control Adviser

1. Failure to put a recommendation in writing;

2. The making of a false or fraudulent statement in any written recommendation;

3. Failure or refusal to comply with any provisions of the Food and Agricultural Code; Chapter 6 - Agricultural Pest Control Advisers, or any other regulation adopted by the agricultural commissioner;

4. Failure or refusal to comply with any provisions of Division 6 or 7 relating to pesticides or regulation of the Department adopted pursuant to such provisions;

5. Failure to qualify by examination in at least one of the pest control categories;

6. Unprofessional conduct.

Any person whose registration has been revoked, suspended, or refused may appeal in writing to the Director, within ten days, for a hearing. The Director may sustain, reverse, or modify the revocation, suspension, or refusal. The county agricultural commissioner may also refuse, revoke, suspend, or condition a permit to possess or use a restricted material. They may also request that the Director stay the commissioner's action for a limited time or until the matter is finally decided. Any person directly affected by this action may appeal to the Director to review the county agricultural commissioner's action.

Agricultural Civil Penalties. In lieu of civil prosecution by the Director, the county agricultural commissioner may levy an agricultural civil penalty against any person violating certain provisions of Divisions 6 and/or 7, or regulations adopted in accordance with these provisions.

Penalties range from fifty dollars ($50.00) up to one thousand dollars ($1,000.00) for each violation. Violations are determined to be either "**minor**" - $50.00-$150.00; "**moderate**" - $150.00-$400.00; or "**serious**" - $400.00-$1,000.00, based on the criteria in regulation, and depending on the circumstances of the incident. (***Appendix items I-2 through I-4*** illustrate the range of agricultural civil penalties, the types and frequency of sections cited, and the occupational summary of agricultural civil penalties over the period of one year.) The criteria for the violation types are:

- Minor violations are procedural or had no impact on human health or the environment.

- Moderate violations are repeat minor violations or violations which posed a reasonable possibility of creating a health or environmental effect.

- Serious violations are repeat "moderate" violations or violations which created an actual health or environmental hazard.

A person charged with a violation shall be notified of the proposed action and has a right to first request a hearing at the commissioner's level. The notification will include the right to appeal to the Director after the final decision is rendered by the commissioner. The person to whom the commissioner levied a civil penalty requested and appeared at a hearing, the person may appeal to the Director within 30 days of the date of receiving notification of the

commissioner's decision. The appeal must be in writing and signed by the appellant or his/her authorized agent, and state the grounds for the appeal, and must include a copy of the county agricultural commissioner's decision. The appeal must also be filed with the county agricultural commissioner at the same time it is filed with the Director.

Quarantine (Produce). The Director may seize and hold any lot of produce, or any unharvested product which is one week of being in a harvestable condition, which carries or is suspected of carrying pesticide residue or other added deleterious ingredients. Upon seizure of any lot of produce, the Director will issue the owner or bailee a Hold Order or Notice. Any lot of produce for which a Hold Order or Notice is issued cannot be disturbed or moved from the place where it is stored, except under specific direction of the Director.

Any lot of produce which is seized and held, unless previously analyzed by the Director, must be sampled and analyzed within 24 hours after the seizure for the purpose of determining the amount of pesticide residue on it. The owner or bailee will be immediately notified by the Director, in person or by telegram, of the sample analysis results. Also, upon demand of the owner or bailee at or prior to the time of the sampling by the Director, the sample which is drawn shall be divided into approximately two equal parts, one part of which shall be sealed and left with the owner or bailee, and the other part taken for analysis by the Director.

If the seized and held lot does not carry any illegal pesticide residue, as determined by the analysis, the Director will release the lot from seizure and remove the Hold Order or Notice.

If the seized and held lot is found to carry illegal pesticide residue, the Director, upon request from the owner, shall permit the lot of produce to be reconditioned or disposed of for by-product purposes which may lawfully contain the pesticide residue. If the Director releases the lot, it must be released to the custody of the county agricultural commissioner. The county agricultural commissioner will supervise the reconditioning or conversion into by-products.

Quarantine (Pesticides). The Director may also seize and quarantine any pesticide that is detrimental to agriculture, public health or the environment, after notice and a hearing (unless it is an emergency). If a pesticide is placed under quarantine, it cannot be moved from the place where it is stored, except under specific direction of the Director.

Crop Abatement. Any lot of produce that is found to carry pesticide residue in excess of any maximum or in excess of a permissible tolerance, is a public nuisance and is subject to disposal on complaint of the Director to a court of competent jurisdiction. The district attorney of the county in which the nuisance is found, at the request of the Director, will take civil action to abate and prevent the nuisance. Upon judgment and order of the court, the nuisance will be condemned and destroyed in a manner directed by the court or otherwise processed or released, as the court, in its discretion, may impose to ensure that the nuisance is abated.

Crop Seizure. A plant, crop, or commodity, whether grown in this State or elsewhere, treated with, or grown on a site, treated with a pesticide **not** registered for use on the plant, crop, commodity or site is a public nuisance and may be seized by order of the Director. The

unlawful treatment provides to the Director the presumption that the treated plant, crop, commodity, or site, or any plant, crop, or commodity grown on the treated site presents a hazard to human health or the environment, and the pesticide was used to gain unfair business advantage for the owner or person in possession or control of the plant, crop, commodity or site, the Director will seize the plant, crop, commodity, or site.

The Director will provide notice to the owner or person in possession or control of the plant, crop, commodity, or site prior to seizure, unless the Director has reason to believe the prior notice would result in the loss of the Director's control over that plant crop, commodity, or site. The notice will specify the grounds for the seizure and provide that the owner or person in possession or control, within 15 days of receipt of the notice, may request a hearing before the Director to contest the seizure. The hearing shall be held not later than five days from the date the owner or person's request is received by the Director. The Director will issue a written decision within five days of the hearing, or within five days of the expiration of the time to request a hearing if no hearing was requested. The decision will either release the plant, crop, commodity, or site from seizure or make any of the following orders:

1. The crop or commodity be destroyed.

2. Prohibit harvest or sale of the plant, crop, or commodity grown on the site.

3. Prohibit the use or planting of the site, which may be for the period of any plant-back time specified for the pesticide used on the site.

4. Any other appropriate action or measure.

Compliance Actions

The county agricultural commissioner may take the following compliance actions against any person who violates the laws and/or regulations pertaining to pesticides:

- Issue a Violation Notice.

- Issue a written notice of non-compliances recorded on a Pesticide Use Monitoring Inspection form and/or a Pest Control Records Inspection form.

- Conduct a compliance interview.

- Issue a Letter of Warning.

These compliance actions are usually employed for first-time offenders of the laws and regulations relating to pesticides. Another type of action is a Cease and Desist Order which may be issued to a person responsible for any use, handling, delivery, or sale of economic poisons in violation of the laws or regulations, and that if allowed to proceed, would present an immediate hazard or cause irreparable damage. ***Table I-1*** on the following page gives an example of compliance actions taken by the county agricultural commissioners over a two year period. For additional information, please refer to ***Appendix I-1, Part B***.

Table 1-1. Number of compliance actions taken by the county agricultural commissioners during Fiscal Years 1992/93 and 1993/94.

County Agricultural Commissioner Compliance Actions		
Types	1992/93	1993/94
Notice of Violations	4,435	3,888
Cease and Desist Orders	243	256
Letters of Warning	2,787	3,233
Compliance Interviews	155	93

Structural Pest Control Suspensions and Civil Penalties

The Structural Pest Control Board and the county agricultural commissioner may suspend the right of a structural pest control licensee or registered company to work in a county for a period of up to three working days or may levy a fine. Depending on the seriousness of the violation, the fine will range from fifty dollars ($50) up to five hundred dollars ($500) for each violation of applicable pesticide laws and regulations.

Review Questions

1. What is the difference between laws and regulations?

2. Who makes the laws?

3. Who adopts regulations?

4. What are the purposes of pesticide and pest control laws and regulations?

5. What agencies might be involved in an investigation of the loss of fish due to pesticide poisoning?

6. What areas are covered under Division 6 of the Food and Agricultural Code?

7. What areas are covered under Division 7 of the Food and Agricultural Code?

8. Who can propose agricultural civil penalties?

9. What are the different types of compliance actions that the county agricultural commissioner may employ against first time offenders of minor violations?

10. Under what conditions may a lot of produce be seized and held by the Director?

11. When might a Cease and Desist Order be issued? To whom is the Order issued?

Chapter II. Pesticide Registration

A pesticide product is required to be registered by the Department of Pesticide Regulation's Pesticide Registration Branch before it can legally be sold, used, or offered for sale in California. The pesticide (economic poison) is required to be properly labeled and to be appropriate for its intended use. DPR may refuse to register any pesticide which does not meet the requirements for registration, and can also reevaluate existing products if a potential adverse effect has been identified.

A company submitting for registration of a pesticide must first obtain U.S. EPA registration prior to submitting their application to California. In addition, California law requires that products sold as adjuvants (also considered economic poisons) be registered with the Department prior to sale and use, although the U.S. EPA does not require registration of adjuvants. Pesticides include, but are not limited to, insecticides, herbicides, rodenticides, sanitizers, disinfectants, and fungicides.

Obtaining Product Registration

Screening the Registration Application Request. The registration process begins with the submission of a data package that is reviewed to ensure that a completed application form and the $200.00 application fee has been submitted, in addition to the U.S. EPA-approved label, copies of the printed label, and all of the required data. California requires the same data that is required by the U.S. EPA, with additional data being required for certain special California conditions. The proposed product label is also reviewed for compliance with the requirements outlined in the Label Requirements section below. Once the data package is determined to be complete, it enters the scientific evaluation process for review by staff scientists.

Label Requirements. Pesticide labels must include the following information:

1. Brand name.

2. Ingredient statement that includes the identity and percentage of each active ingredient along with the total percentage of the inert ingredients. The sum of the percentages must equal 100%.

3. Signal word. This is based on the acute toxicity of the product and forewarns the user of potential hazards associated with it.

"DANGER" is used for the high Category I toxicity. In some cases, the product will also be required to bear the word **"POISON"**, along with the skull and crossbones.
"WARNING" is used for the moderate Category II toxicity.
"CAUTION" is used for the slightly or relatively non-toxic Category III toxicity.

4. Precautionary statements. These statements address the potential hazards to humans, such as dermal (skin), oral, inhalation, and eye hazards. Protective clothing or equipment requirements may also be found in this section or may be located in another section of the label.

5. Other hazards, such as to the environment or to domestic animals, are identified, as well as any physical/chemical hazards such as flammability or explosiveness of the product.

6. Storage and disposal instructions for the pesticide and its container.

7. Directions for use to include the following:
   a. site of application (crops, animals, structures, objects)
   b. dosage rate for each site
   c. method of application
   d. dilution instructions, if needed
   e. frequency and timing of applications

8. "Restricted Use Pesticide" statement on federally restricted products only.

9. EPA Registration Number. The U.S. EPA registration number is required for each federally registered product. For adjuvants, a California registration number (CA Reg. No.) is issued. For Section 24c, special local need registrations, the CA SLN No. must also appear on the label.

10. EPA Establishment Number (this appears on the label or the container).

11. Net weight or volume.

12. Registrant's name and address.

Scientific Evaluation. The data package is entered into the scientific evaluation process in order to evaluate the following required data:

- Acute toxicology data is evaluated for any immediate effects of exposure to the pesticide which determines what the signal word and precautionary statements should be.

- Product chemistry data which shows the physical and chemical properties of the product are reviewed by the chemist.

- Residue chemistry data is required if the pesticide is to be used on a food or feed crop. U.S. EPA establishes a residue tolerance level for the pesticide on the crop or commodity. The chemist reviews this data which is needed to show that at the labeled rates and method of application, the legal tolerance limit will not be exceeded.

- Worker health and safety aspects of the product's proposed uses are also reviewed.

- Efficacy data is reviewed to determine whether the pesticide product will work and be effective as claimed on the label.

- Fish and wildlife data, if applicable, is reviewed by the biologist.

- Phytotoxicity data is reviewed to determine any potential damage to the plants (crop or ornamental) when using the product.

- For products containing a new active ingredient to California, chronic toxicology data are required in addition to the data listed above. If the product is for agricultural use, environmental fate data is also required to determine any possible ground water effects.

After the scientific evaluation process is completed, the decision to register or to deny the product is posted for a 30-day public comment period. If the final decision is to register the product, a license (Certificate of Registration) is issued and the product can legally be sold and used.

Licensing of the Product (Certificate of Registration)

When the Certificate of Registration is issued and the stamped, accepted label becomes the legally registered label, the label is placed in the Information Center's label file. Use of the product must be in accordance with the registered label, although in some cases, further restrictions can be placed on the product's use by passing a regulation, making the product a California-restricted material and imposing permit conditions. Every registered product is subject to an annual renewal fee of $200.00 per product and a quarterly mill tax. See the section on mill tax requirements in Chapter XII. If the product registration lapses, the product can no longer be sold by the registrant.

Amending the Registered Label

Any changes made to the legal registered label must be reviewed and approved by the Department's Pesticide Registration Branch and by U.S. EPA (except adjuvants) before the product bearing the amended labeling can be sold or used in California.

Subregistrations, additional brand names, or changes of product ownership must also receive approval before the product can be sold or distributed.

Currently Registered Products

Once a product is registered (licensed), it is subject to data call-ins, reporting of adverse effects, and other reevaluations. In some cases, the outcome of any of these actions could be suspension or cancellation of the product's registration.

Product No Longer Registered

There are two ways that a product may no longer be registered: (1) if the manufacturer does not renew the registration and allows it to lapse; or (2) if a suspension/cancellation has been taken against the product.

1. If the registration has been allowed to lapse or is not renewed by the company, a dealer who acquired the product while the product was still registered may lawfully sell and deliver the product for two years after the last date of registration. If the pesticide product was acquired by an end-user while legally registered or within two years after the last date of registration, the product may be possessed and used indefinitely in accordance with the label. Recommendations may still be made and restricted material permits, if required, may still be issued.

2. If a cancellation or suspension has been issued, any provisions for sales of existing stocks or use of the product are made at that time. *A pesticide product cannot legally be sold or used, nor can a permit be issued contrary to any U.S. EPA or DPR cancellation or suspension order.*

Special Local Need Registrations and Emergency Exemptions

There are two special situations where an additional label can be issued by the state, without a manufacturer having to first add the use to their U.S. EPA-approved label. The special local need registrations and emergency exemptions must meet very specific criteria, and once they are issued, have special limitations and special labeling. These labels are in addition to the federal U.S. EPA label and are to be used in conjunction with that label. Also required are certain data and a justification that there are no other registered products or alternatives available to meet the special local need or the emergency situation.

Section 24c, Special Local Need (SLN) Registrations.

- A residue tolerance is already established for the active ingredient on the particular crop (or a tolerance level is not required for the chemical or the use is non-food/non-feed).

- The label is issued with site and uses specific to the special use and can be issued as a 1st-party SLN (issued to the manufacturer) or 3rd-party SLN (someone other than the manufacturer).

- The label, which is identified by its California SLN number (SLN CA-000000), is to be used in conjunction with the federally registered label.

- The SLN use is not a restricted materials use unless the product itself, or its prior use, was previously made federally or State restricted.

- Generally, there is no expiration date. Most SLNs are issued for an indefinite time. Sometimes, the SLN use is eventually added to the federal label and the SLN label is inactivated.

Section 18, Emergency Exemptions, are issued to meet an emergency pest situation which has been well documented and justified.

- Issued on food or feed crop which has <u>not</u> had a residue tolerance established for the particular pesticide. The U.S. EPA sets a residue "action level" for the Section 18 use.

- The Section 18 "label" includes the specific site and directions, and is to be used in conjunction with the federally registered product label.

- The product's use under a Section 18 automatically becomes subject to the ***restricted materials requirement*** and a permit must be obtained from the county agricultural commissioner's office.

- The expiration date is one year or less from issuance, although renewals may be authorized if the emergency situation can again be documented.

- It is the U.S. EPA that issues the Section 18 to the state, unlike SLNs which the state can issue without prior U.S. EPA approval.

Research Authorizations

Research Authorizations (RAs) are issued by the state to allow research on limited acreage and sometimes require that the crop be destroyed. RAs are different from Experimental Use Permits (EUPs) which must be reviewed and registered by the U.S. EPA and then by DPR. Colleges and universities doing research, and pesticide registrants doing experimental work on property under their control, do not need to obtain an RA.

Review Questions

1. How frequently is a product's registration renewed?

2. What is the purpose of the signal word on the label?

3. Write the signal word(s) that corresponds with each of the pesticide toxicity categories listed below:

   Toxicity Category I =

   Toxicity Category II =

   Toxicity Category III =

4. Which of the three pesticide toxicity categories is the most toxic?

5. The statement "Restricted Use Pesticide" is required to appear on all State and federally restricted materials.

   True or False

6. All pesticide products must have an ingredient statement which includes the identity and percentage of each of the active ingredients and the total percentage of the inert ingredients.

   True or False

7. What is the difference between the signal word/precautionary statements and the other warning statements?

8. What are the five items that the "Directions for Use" on a label must address?

9. How long after a registration has lapsed may a pest control dealer legally sell or deliver a pesticide?

10. If a previously registered pesticide product was legally acquired by the end user, how long does the end user have to possess and use the pesticide product? Is it legal for an agricultural pest control adviser to make a recommendation for use of such a product?

11. Name two of the differences between a Section 18 and a Section 24c.

12. How long is a Section 18 issued for before it must be reissued?

13. How long is a Section 24c issued for?

14. When is a permit for use required with a Section 18? Where would you obtain the permit?

15. When is a permit for use required with a Section 24c? Where would you obtain the permit?

Chapter III. Restricted Materials

Certain pesticides, for various reasons, are potentially more hazardous than other pesticides. The Administrator of the U.S. Environmental Protection Agency (U.S. EPA) has designated these pesticides as restricted use pesticides. The Director of DPR has also designated certain pesticides as California Restricted Materials. The California Restricted Materials list includes U.S. EPA-restricted use pesticides and those pesticides designated by the Director to be California restricted materials. As a result, the use of these materials is regulated more closely and permitted only when additional precautionary measures are taken. ***See Appendix III-1***, California Restricted Materials Requirements, for a list of the California restricted materials.

Registration of a restricted pesticide does not, in itself, give people the right to possess and/or use the pesticide. Rather, registration is a DPR determination that, under appropriate local conditions, the county agricultural commissioner may grant a possession and use permit for the California restricted material to certified commercial or private applicators (See page III-11).

Federally Restricted Use Pesticides

The U.S. Environmental Protection Agency has classified certain pesticides as federally restricted use pesticides. Federally restricted use pesticides will bear the statement "**Restricted Use Pesticide**" on the labels. These pesticides are classified as restricted use because of determinations that acute dermal or inhalation toxicity of the pesticides presents hazards to the applicators or others, or because of determinations that their use, by less knowledgeable applicators, may cause unreasonable adverse effects on the environment. A restricted use pesticide or California restricted material, may only be applied by certified private or commercial applicators, or persons directly under their supervision, unless otherwise specified by labeling. See ***Appendix III-1*** for a list of Federally Restricted Materials.

Currently, there are four federally restricted use pesticides that require the certified applicator to provide direct supervision and to be physically present when noncertified persons are involved in applying, mixing, and loading these pesticides, and when repairing and cleaning the application equipment. The four pesticides are Metasystox-R, methyl parathion, aluminum phosphide, and Methomyl.

The "physically present" statement means the certified applicator must be in line of sight to observe that noncertified persons are following the label directions, to provide guidance if the label is unclear, and to affect changes in procedures if they are not being adhered to, or an unusual situation occurs.

California Restricted Materials

The law provides for the Director, the authority to establish a list of restricted materials based upon the following criteria which includes:

1. Danger of impairment to public health.

2. Hazards to applicators and farm workers.

3. Hazards to domestic animals, including honeybees, or to crops from direct application or drift.

4. Hazards to the environment from drift onto streams, lakes, or wildlife sanctuaries.

5. Hazards related to persistent residues in the soil resulting ultimately in contamination of the air, waterways, estuaries, or lakes with consequent damage to fish, wild birds, and other wildlife.

6. Hazards to subsequent crops through persistent soil residues.

The Director has adopted regulations concerning the possession and use of any restricted material. The regulations prescribe the time when, and the condition under which, a restricted material may be used or possessed in the State. The usage is limited to those situations in which it is reasonably certain that no injury will result, or no nonrestricted material or procedure is equally effective and practical. Regulations provide that a restricted material, with certain limited exceptions, may be used only under the permit of the county agricultural commissioner or under the direct supervision of the county agricultural commissioner, subject to any of the following limitations:

1. In certain areas.

2. Under certain conditions relating to safety.

3. Limited to certain quantities or concentrations.

4. Limited to certain mixtures.

5. In compliance with the industrial safety orders of the Department of Industrial Relations and any order of the Director of DPR or county agricultural commissioner.

6. Upon agreement by the owner or person in possession of the property to be treated to comply with certain conditions.

Restricted Materials Permit

Any restricted material, with certain exemptions, shall be used and possessed for agriculture

use, only under a written permit of a county agricultural commissioner. Before a permit is issued, the county agricultural commissioner must consider local conditions, including the following:

1. Location of schools, homes, hospitals, recreational areas, livestock enclosures, and problems related to heterogeneous (dissimilar) planting of crops.

2. The possibility of resurgence of primary or secondary pests that may result from improper pesticide choice. The application might kill parasites and predators, subsequently promoting a new or more severe pest problem.

3. Weather conditions.

4. Timing of applications in relation to bee activity. Proper timing can greatly reduce hazards to bees. Some pesticides may be applied at night or early in the morning and would not present a severe hazard to bees. The same pesticide applied during the day may have a devastating effect on bees.

5. Pesticide storage facilities and disposal of used containers. All pesticides must be stored in a locked enclosure except when someone is physically in control of them. The storage and container disposal requirements are addressed in Chapter V of this Study Guide.

The conditions of use will be specified in the permit. Every permit issued is conditioned upon compliance with the laws and regulations. Please refer to the Private Applicator Certification flow chart in ***Appendix III-2***, and the Restricted Materials Permit flow chart in ***Appendix III-3***.

Alternatives and Mitigation Measures. Each Agricultural Pest Control Adviser and grower, when determining if and when to use a pesticide that requires a permit for any agricultural use, must consider, and if feasible, adopt any reasonable, effective, and practical mitigation measure, or use any feasible alternative which would substantially lessen any significant adverse impact on the environment.

Each Pest Control Business must have available, either a copy of a written recommendation or a grower's work order, covering each agricultural use application of a pesticide that requires a permit, and operate their pest control operations in accordance with the restricted materials permit conditions.

Nonagricultural Permit. Permits for nonagricultural use may be issued to the operator of the property to be treated, or the Pest Control Business licensee, or both. No permit is valid for possession or use by any operator or person not named in the permit. An application for a permit for the nonagricultural use of a pesticide must include the following information:

1. Name and address of the applicant.

2. Pesticide(s) to be used.

3. Pest(s) to be controlled.

4. Method of application.

5. Criteria for determining the need for the pesticide application.

See the Restricted Materials Permit System for Nonagricultural Use, ***Appendix III-4.***

Agricultural Permit. Permits for agricultural use of pesticides must be site and time specific and may be issued only to the operator of the property to be treated, or when allowed by the county agricultural commissioner, to the operator's authorized representative; however, the operator of the property is responsible for compliance with all permit conditions. No permit is valid for possession or use by any operator or person not named in the permit. An application for a permit for the agricultural use of a pesticide must include the following information:

1. Name and address of the applicant.

2. Location of each property to be treated.

3. Identification of all known areas that could be adversely impacted by the use of the pesticide(s) including, but not limited to, hospitals, schools, playgrounds, residential areas (including labor camps), parks, lakes, waterways, wildlife management areas, livestock, or crops. A map or aerial photograph may be used for designating such areas.

4. Identification of each commodity or crop, or if there is no commodity or crop, the site to be treated.

5. Anticipated pest problem(s) for each crop (pest[s] to be controlled).

6. Pesticide(s) requiring a permit necessary to control each pest on each commodity, crop, or site.

7. Approximate date(s) or crop stage(s) of intended pesticide application(s).

8. Expected method of application including the dilution, volume per acre or other units, and dosage.

9. Name of the pest control operator, if any.

See ***Appendix III-5***, Restricted Materials Permit System describing Agricultural Use.

The restricted materials permit application for certification, as well as use permit, will furnish the county agricultural commissioner or Director with information to evaluate the applicant's knowledge in the areas of applicable laws and regulations, label directions and restrictions, pest(s) to be controlled, application equipment, storage facilities, personal protective

clothing and equipment required, poisoning symptoms, surrounding environmentally sensitive areas, the plan of operation, etc.

Permit Duration. A permit to use the restricted material is valid for the period specified unless revoked or suspended sooner, but in no case shall this period be more than 12 months. The person named in the permit is authorized to retain possession of the material for which the permit was valid after the permit expires, provided the pesticide is not held for sale, and is stored properly. (Storage requirements are addressed in Chapter V of this Study Guide.)

Each permit issued for the agricultural use of a pesticide must be site and time specific. Permits that are valid for a season or a year may be issued by the county agricultural commissioner so that advanced pest control planning can be accomplished by the applicant. The absence of a permit valid for a season or a year shall not prohibit or restrict any applicant from applying for and obtaining a permit for a shorter duration.

Permit Exemptions. Pesticide registrants and pest control dealers, when operating under their license(s), and commercial carriers when transporting such materials, are not required to obtain a restricted materials permit to possess the restricted materials.

No permit is required to possess and/or use a pesticide that is only federally restricted when it is possessed or used by or under the supervision of a certified commercial applicator, unless otherwise required by the county agricultural commissioner.

No permit is required to possess and/or use antifouling paints or coatings containing tributyltin when purchased, possessed or used by, or under the supervision of, a certified commercial applicator with Category L.

No permit is required to possess and/or use restricted materials used only for experimental or research purposes when possessed or used, by or under the supervision of, research personnel from colleges and universities provided they are operating according to the current established policy of the college or university which covers pesticide use or experimentation.

No permit is required to possess and/or use restricted materials used according to a valid Research Authorization.

Notice of Intent (NOI). Permits issued for agricultural use of pesticides are required to be site and time specific; therefore, an NOI must be submitted to the county agricultural commissioner at least 24 hours prior to commencing the use of the pesticide. The county agricultural commissioner may allow less than the required 24-hour NOI if he/she determines that, because of the nature of the commodity or pest problem, effective pest control cannot be attained, or when 24 hours are not necessary to evaluate the intended application.

The NOI may be submitted to the county agricultural commissioner by the operator of the property to be treated, the operator's authorized representative, or the licensed pest control operator who is to make the pesticide application.

The NOI must provide the following information concerning the proposed application. If the information has been provided on the permit, it may be referenced on the NOI.

1. Permit number.
2. Name and address of permittee and applicator.
3. Location of areas to be treated and name of farm operator.
4. Crop or commodity, or if there is no crop or commodity, the site to be treated.
5. Approximate acres or other units.
6. Method of application and the pesticide(s) .
7. Dilution, volume per acre or other units, and dosage.
8. Pest(s) to be controlled.
9. Date intended application is to commence.
10. Locations and identity of areas which have changed since the permit was issued and which may be adversely impacted.

Permit Evaluation

Each county agricultural commissioner, prior to issuing any restricted materials permit and when evaluating an NOI, must determine if a substantial adverse environmental impact may result from the use of such pesticide. If the county agricultural commissioner determines that a substantial adverse environmental impact will likely occur from the use of the pesticide, he/she must determine if there is a feasible alternative, including the alternative of no pesticide application, or feasible mitigation measures that would substantially reduce the adverse impact. If the county agricultural commissioner determines that there is a feasible alternative or feasible mitigation measure which significantly reduces the environmental impact, the permit or intended pesticide application must be denied or conditioned on the utilization of the mitigation measures.

In making these determinations, the county agricultural commissioner must consider and utilize applicable sections of the California Food and Agricultural Code and California Code of Regulations, pest management guides, restricted material hazard charts, Pesticide Safety Information Series (PSIS), information obtained from monitoring other pest control operations, and any other information provided by the Director.

In addition to the required information specified in the Nonagricultural Permit and Agricultural Permit sections, each permit must contain the following:

1. Appropriate conditions or limitations on the use of the pesticide(s) including available

PSIS leaflets for each pesticide included on the permit.

2. Requirements, if any, for an NOI prior to the pesticide application.

3. Appropriate conditions or limitations such as those described in pest management guides. The county agricultural commissioner will inform the permittee of the guides applicable to the pest control authorized in the permit, and where to obtain them.

Pesticide Safety Information Series (PSIS). The Department has developed a number of PSIS leaflets to provide additional information about pesticides, groups of pesticides, or general information about the use of pesticides (e.g., first aid, respiratory protection, storage and disposal). The county agricultural commissioner will provide all applicable PSIS leaflets to the permittee at the time of permit issuance. Also included in this publication in ***Appendix III-6*** are some of the pertinent PSIS leaflets.

Generalized Effects. If at any time pesticide residues, symptoms, or health hazards appear generally throughout any area, the Director or county agricultural commissioner may make a field inspection. If it appears that substantial loss, damage, or injury is likely to result from continued application of a specific pesticide within such area, the Director or county agricultural commissioner may cancel all permits for applications of that pesticide within such area, and specify that no additional permits may be issued therein.

Use Requirements. Regulations specify restrictions on the use of restricted materials. These restrictions apply to all persons to whom restricted materials permits have been issued. The restrictions of use may include the amount of pesticide that can be applied, methods of application, where the pesticide can be applied, additional protective clothing and safety equipment that must be worn or used, etc. Persons intending to use these pesticides will be informed of the use restrictions at the time a permit is issued and must fully comply with them.

- Chloropicrin and methyl bromide (field fumigation; nursery and commodity fumigation; structural fumigation, aeration, and reentry)
- Sulfuryl fluoride (structural fumigation, aeration, and reentry)
- Aldicarb (Temik)
- Herbicides: paraquat (Gramoxone), 2,4-D; 2,4-DB; 2,4-DP; MCPA; dicamba (Banvel); and Propanil.
- 1,3-dichloroproprene (Telone II)
- Tribufos (DEF, Folex)
- Carbofuran (Furadan)
- Fenamiphos (Nemacur)

- Atrazine
- Simazine
- Bromacil
- Diuron
- Prometon
- Bentazon (Basagran)

NOTE: This list is subject to change. Consult with the local county agricultural commissioner for the latest information.

All protective clothing and safety equipment required in these restrictions must be provided to employees by their employer. Employers are required to ensure that all employees wear and use all such clothing and equipment.

Pest Control Dealer Responsibility

Before a licensed Pest Control Dealer may sell or deliver a restricted material that requires a permit for its possession or use, he/she must obtain a copy of the permit which authorizes possession or use of the kind and quantity of the restricted material on the date the restricted material is delivered. Other Pest Control Dealer requirements are addressed in Chapter IV - Pest Control Dealer Responsibilities.

Exempt Materials

Certain pesticides that may be used without undue hazard have been designated as exempt materials. The Director has determined that additional restrictions, other than those required by the label, are not necessary, therefore, exempt materials may be used without a permit. These exempt materials include the following:

- Spray adjuvants.
- Petroleum oils.
- Sulfur.
- Lime.
- Lime sulfur.
- Sodium polysulfide.
- Bacillus thuringiensis, Berliner.

- Certain copper compounds:

  Bordeaux mixture.
  Copper acetate.
  Copper carbonate.
  Copper hydroxide.
  Copper-lime mixture.
  Copper linoleate.
  Copper oleate.
  Copper oxychloride.
  Cuprous oxide.
  Copper calcium oxychloride.

Uses and/or Formulations Exempt from Restriction

The materials listed below are not classified as restricted materials, unless the pesticide is a federally restricted use pesticide:

1. Pesticides containing carbaryl formulated as a bait.

2. Fly bait containing 1% methomyl or less.

3. Pesticides used only on livestock or poultry in accordance with the registered labeling.

4. A wax block impregnated with certain restricted herbicides.

5. Diluted, ready-to-use solution of certain restricted herbicides in a liquid formulation.

6. One quart or less of a product containing certain restricted herbicides in a liquid formulation.

7. One gallon or less of a product containing the following percentages of restricted herbicide in a liquid formulation:

   - 15% or less dicamba
   - 15% or less MCPA
   - 15% or less of 2,4-D
   - 15% or less of 2,4-DB
   - 15% or less of 2,4-DP

8. Up to 50 pounds of certain restricted herbicides (phenoxyl and dicamba) containing 10% or less of active ingredient prepared for use without further dilution.

9. One pound or less of a product containing certain restricted herbicides (phenoxyl and dicamba) in a dry formulation.

NOTE: Permit requirements and exemptions change from time to time. Consult with the local county agricultural commissioner or DPR for the latest information.

Exemptions from the Permit Requirement

The following six pesticides listed under 3 CCR, 6800 (a), have the potential to pollute ground water:

- Atrazine
- Bentazon
- Bromacil
- Diuron
- Prometon
- Simazine

A permit is not required for **certified commercial applicators** using the above materials outside of a pesticide management zone (PMZ), and antifouling paints or coatings containing tributyltin.

NOTE: Permit requirements and exemptions change from time to time. Consult with the local county agricultural commissioner or DPR for the latest information.

Refusal, Suspension, or Revocation of a Restricted Material Permit

A restricted material permit may be refused, revoked, or suspended for violating any condition of the permit, or any provision of the laws or regulations, such as:

- Failure to maintain pesticide use records for two years, or failure to report such use as required by the Director or county agricultural commissioner.
- Preparing false or fraudulent records or reports.
- Refusing to allow the county agricultural commissioner or Director of DPR to enter and inspect a treatment site or storage facility; or inspect application equipment, or the pesticide product(s) being used.

Supervision Standards for Certified Applicators

Restricted materials shall be used only by or under the supervision of a certified commercial or private applicator. The certified applicator responsible for this supervision must be aware of conditions at the site of application and be available to direct or control the manner in which

applications are made by noncertified applicators. The availability of the certified applicator shall be directly related to the actual or potential hazard of the situation. It should be noted that the presence of a certified applicator at the use site may be required by the labeling.

All commercial applicators are required to take and pass an examination on laws and regulations, and safety, as well as, an examination in one or more of the different categories (see ***Table 4 - 1, page IV - 2***) depending on the type of pest control to be conducted, before they are certified.

The Qualified Applicator Certificate and Qualified Applicator License examinations are prepared and administered by the Director according to a predetermined schedule. Applicants who obtain a score of 70 percent or greater on the laws, regulations, and safety examination and one or more category examination will be issued a Qualified Applicator Certificate or a Qualified Applicator License, dependent upon the program they examined for, authorizing the possession and use of restricted materials applicable to the category(ies) they possess. The licensing and certification requirements are further addressed in Chapter IV of this Study Guide.

Review Questions

1. Why are certain pesticides classified as restricted materials?

2. What are the two different types of restricted materials?

3. What is the purpose of the restricted materials permit?

4. What must an Agricultural Pest Control Adviser consider when determining if and when to use a pesticide that requires a permit?

5. Who may obtain a permit for the agricultural use of a restricted material? Nonagricultural use?

6. Which permit (agricultural or nonagricultural) is required to be site and time specific?

7. What local conditions must the county agricultural commissioner consider before issuing a permit to possess and use a restricted material?

8. What are the supervision standards for the certified applicator?

9. A permit for a restricted use pesticide is only valid when a permit is possessed and used by whom?

10. When is a Notice of Intent required?

11. What is the purpose of Pesticide Safety Information Series leaflets?

12. Regulations specify restrictions on the use of certain restricted materials. What might the restrictions include?

13. What is the maximum time period that a restricted materials permit is valid?

14. What must a pest control dealer obtain prior to the sale or delivery of a restricted material that requires a permit?

Chapter IV. Licensing and Certification

Any person who conducts pest control for hire in California must be licensed by the Department of Pesticide Regulation (DPR) and/or the Structural Pest Control Board (SPCB). DPR issues licenses to persons who perform pest control for hire; excluded from the Department's licensing requirements are persons who engage for hire in any of the following:

- Structural pest control.
- Preservative treatment of fabrics or structural materials.
- Household or industrial sanitation services.
- Seed treatment which is incidental to such person's regular business.

Also, a person who is regularly engaged in the business of tree surgery is not required to obtain a license to remove diseased or infested tissues or apply disinfectants to wounds or cavities **incidental** to tree surgery. If such person desires to engage in pest control activities other than tree surgery, he/she must obtain a license from DPR.

The Department also issues licenses or certificates to individuals who supervise the pest control operations of licensed businesses, and to individuals who use or supervise the use of restricted materials.

The SPCB issues licenses for persons that perform structural pest control for hire in the following areas: structural fumigation; general structural pest control; termite structural pest control; and wood roof cleaning and treatment. For additional information on structural pest control licensing requirements, contact the SPCB, Department of Consumer Affairs, 1422 Howe Avenue, Suite 3, Sacramento, California 95825-3280, (916) [redacted]

There may be times when it may be difficult to determine whether you need an agricultural or a structural pest control license. Should this situation arise, the interested party should contact the DPR's Pesticide Enforcement Branch, Licensing and Certification Unit or the SPCB, for advice on which license is required.

Pest Control Business License

Any person who performs pest control for hire must obtain a Pest Control Business License (unless he/she is exempted from the licensing requirements). There must also be a qualified applicator licensee who is responsible for the pest control operations of the business. A Qualified Applicator License is obtained by passing an examination in laws and regulations

pertaining to pesticides and pest control operations, and basic safety principles, plus one or more of the categories listed in ***Table 4-1***, depending on the type of pest control to be conducted by the business.

Table 4-1. Qualified Applicator License and Certificate Pest Control Categories

(A)	Residential, Industrial, and Institutional.
(B)	Landscape Maintenance.
(C)	Right-of-Way.
(D)	Plant Agriculture.
(E)	Forest.
(F)	Aquatic.
(G)	Regulatory.
(H)	Seed Treatment.
(I)	Animal Agriculture
(J)	Demonstration and Research.
(K)	Health-Related.
(L)	Wood Preservation (subcategory of [A] and [C]).
(M)	Antifouling-Tributyltin (subcategory of [A]). This subcategory is for Qualified Applicator Certificates only.

The scope of each category for a Qualified Applicator License is addressed in ***Appendix IV-1***; the scope of each category for a Qualified Applicator Certificate is addressed in ***Appendix IV-2***.

Minimum Requirements. Once the Qualified Applicator License requirement is satisfied, a Pest Control Business License can be applied for by submitting a completed application and the required fee to the Department. The name of the person holding the qualified applicator license and the license number must be listed on the application, as well as the name of the worker's compensation insurance policy carrier, policy number, and the policy expiration date, if there are employees. In addition, the applicant must be financially able to respond to damages resulting from the pest control work. This requirement can be satisfied by obtaining one of the following: liability insurance, a Surety Bond, or a Certificate of Deposit in the Director's name. A Pest Control Business License cannot be issued unless these requirements are satisfied.

County Registration. Once a person secures a Pest Control Business License, the person must register with the agricultural commissioner in each county in which the business intends to perform pest control, prior to conducting such work. Most counties require a fee for registration. The fee applies to the registration of the principal office location and each branch office location. Registration is required annually and covers a calendar year period.

Pest Control Equipment. Each person engaged in the business of pest control for hire must conspicuously and legibly identify each piece of equipment used for mixing or applying

pesticides. Each ground rig, service rig, and similar equipment used for mixing or applying pesticides must be marked with either the business' name, or with "Licensed Pest Control Operator", "Fumigation Division", or similar wording, and the pest control operator license number of the person or firm. The markings must be large enough to be readable at a distance of 25 feet.

In addition, each piece of equipment used by a pest control business must be registered in each county of operation. The county agricultural commissioner may arrange to have all of the firm's pest control equipment inspected at the time of registration to ensure that it is properly marked and in proper safe working condition.

Notice. Each person performing pest control must give notice to the operator of the property to be treated and obtain that person's consent **before** any pesticide is applied. The operator of the property must give notice to all persons known to be on the treated property or likely to enter during the period of time that any restrictions on entry are in effect. If the Notice is given to a farm labor contractor, then the farm labor contractor must give notice to his/her employees. Each notice must specifically state the date of application, identify the pesticide by brand name or common chemical name, and be adequate to advise of the precautions, including reentry restrictions, to be observed as printed on the registered label or included in applicable laws and regulations.

Completion Notice. In addition to the above notice, a Pest Control Business applying pesticides for the production of an agricultural commodity must give notice to the operator of the property treated (or the operator's designated employee), within 24 hours of completion of the pesticide application. The operator's designated employee must have the authority and ability to reschedule or stop activities involving field workers performing cultural practices (e.g., irrigating, thinning, tree-limb propping, weeding, harvesting). This notice must include the following information:

1. The location of the property, including the Site Identification Number, and acreage treated.

2. The pesticide(s) applied.

3. The date and hour the application was completed.

4. The applicable reentry and pre-harvest intervals, unless a copy of a written recommendation made by a licensed Agricultural Pest Control Adviser was given to the operator of the property being treated.

If the operator of the property (or the operator's designated employee) will not be available to receive the Notice within the 24-hour period, the operator must identify, in writing, the method by which the Pest Control Business may provide notification. The method may be, but is not limited to, any of the following:

- Post or leave the Notice in a designated location on the operator's property.

- Record the notification on a phone recorder.
- Send the Notice over a facsimile machine.

The operator of the property treated must maintain a record of the application completion notice(s) he/she receives by site, and a copy of the written notification method provided to each Pest Control Business, if one is required.

The Pest Control Business must retain a copy of the written notification method received from the operator of the property, if the business received one. The business must also maintain a written record which documents the following:

1. The name of the operator of the property treated.

2. The location of the property, including the Site Identification Number.

3. The date and time the Notice was given.

4. The method of notification, including the name of the person notified, if a person was notified.

The records and written notification method must be retained for two years and made promptly available to the county agricultural commissioner or Director upon request.

Recommendation and Use Permit. Each person engaged for hire in the business of pest control must have available a copy of both the written recommendation and the use permit covering each agricultural use application of a pesticide that requires a restricted materials permit.

Accident Reports. Each person engaged for hire in the business of pest control must report to the commissioner as soon as practicable, by the most expedient method (e.g., radio or telephone), any forced landing, emergency or accidental release of pesticides. The report must include the location, the pesticide, and the estimated amount of released pesticide.

Pesticide Use Records. Any person engaged for hire in the business of pest control must maintain records of pesticide use. The records must include the following information for each pest control operation:

1. Date of application.

2. Name of the operator of the property treated.

3. Location of property treated.

4. Crop, commodity, or site treated.

5. Total acreage or units treated at the site.

6. The name of the pesticide, including the U.S. EPA or State Registration Number which is on the pesticide label, and the amount used.

In addition to the required information previously listed in Numbers 1 through 6, the operator of the property that is producing an agricultural commodity and the Pest Control Business applying pesticides to such property, must include in the records the following information for each pest control operation:

1. Location of the property treated, by county, section, township, range, base, and meridian.

2. Hour the treatment was completed.

3. The Operator Identification Number issued to the operator of the property treated.

4. The Site Identification Number issued to the operator of the property treated.

5. Total acreage (planted) or units at the site.

6. Name or identity of the person(s) who made and supervised the application, if the pesticide application was made by a Pest Control Business.

These records must be retained for two years and made immediately available to the county agricultural commissioner or Director upon request.

Pesticide Use Reports for Production Agriculture. A Pest Control Business must report the use of the pesticides applied by it for the production of an agricultural commodity to the county agricultural commissioner of the county in which the pest control was performed, by hand-delivery or mail, within seven days of completion of the pesticide application. If the report is mailed, the postmark is the date of delivery.

A copy of the report must be sent by the business to the operator of the property where the pest control was done, also within 30 days of completion of the pesticide application. The operator of the property is required to retain a copy of the business' report by site for two years.

Each report of pesticide use must be on a DPR form (which may be obtained from the county agricultural commissioner) or in a format approved by the Director. The information to be reported must include the information specified in "Pesticide Use Records" and the name and address of the Pest Control Business which made the application.

The pesticide use reporting system is designed to generate data to address the numerous issues (e.g., field worker/reentry issues, ground water issues, endangered species) that California agriculture is presently facing or will be facing in the future. See ***Appendix IV-3***.

Operator Identification Numbers. The operator of the property producing an agricultural commodity must obtain an Operator Identification Number from the county agricultural commissioner of each county where pest control work will be performed prior to the purchase and use of pesticide(s) for the production of an agricultural commodity. The operator must provide each pest control business applying pesticides to such property with his/her Operator Identification Number.

Negative Pesticide Use Reports. During any month a licensed Pest Control Business performs no pest control work in a county where the business is registered, it must submit a negative Pesticide Use Report to the county agricultural commissioner by the tenth day of the following month. If the report is mailed, the postmark is the date of delivery.

Violations. It is unlawful for any person that is performing pest control for hire to do any of the following:

- Make any false or fraudulent record or report.
- Operate in any county without first having registered with the county agricultural commissioner.
- Operate without first having secured a pest control business license from the Director.
- Operate equipment with incompetent or unqualified persons in charge of the equipment.
- Use any fraud or misrepresentation in making application for a license or for renewal of a license.

Maintenance Gardener Pest Control Business License

Gardeners, landscape maintenance service companies, and interiorscape service companies that apply pesticides as an **incidental** part of their business must be licensed as a Maintenance Gardener Pest Control Business. This license is required for any incidental pest control when it is done for hire, including the use of snail bait and other pesticides provided by the homeowner.

Persons who contract to do landscape maintenance with parks, golf courses, or cemeteries are required to obtain a Pest Control Business License if their work includes pest control. Pest control for hire in these settings is **not** covered under the scope of a Maintenance Gardener Pest Control Business License.

Minimum Requirements. To qualify for a Maintenance Gardener Pest Control Business License the applicant must first obtain a Qualified Applicator Certificate (or a Qualified Applicator License) by passing an examination in laws and regulations pertaining to pesticide and pest control operations, basic safety principles, and the Landscape Maintenance Pest

Control Category (see ***Table 4-1, page IV - 2***). A Maintenance Gardener Pest Control Business License can be applied for by submitting a completed application and required fee to DPR. The name and license number of the qualified person(s) must be listed on the application, as well as the name of the worker's compensation insurance carrier, policy number, and policy expiration date, if there are employees. In addition, the applicant must be financially able to respond to damages resulting from the pest control work. See the Maintenance Gardener Pest Control Business License flow chart in ***Appendix IV-4***.

County Registration. Once a person secures a Maintenance Gardener Pest Control Business License, the licensee must register with the county agricultural commissioner in each county in which the business intends to perform pest control, prior to conducting such work. Most counties require a fee for registration.

Arrangements must be made with the county agricultural commissioner to inspect the pest control equipment for proper markings and proper safe working conditions.

Pesticide Use Records. Any person engaged for hire in the business of pest control must maintain records of pesticide use. The records must include the following information for each pest control operation:

1. Date of application.

2. Name of the operator of the property treated.

3. Location of property treated.

4. Crop, commodity, or site treated.

5. Total acreage or units treated at the site.

6. The name of the pesticide, including the U.S. EPA or State Registration Number which is on the pesticide label, and the amount used.

These records must be retained for two years and made promptly available to the county agricultural commissioner or Director upon request.

Monthly Summary Pesticide Use Reports. Maintenance Gardener Pest Control Businesses that are required to maintain pesticide use records, must report a monthly summary of pesticide use to the county agricultural commissioner of the county in which the work was performed, by hand-delivery or mail, by the tenth day of the month following the month in which the work was performed. If the report is mailed, the postmark will be the date of delivery .

The report must be made on the DPR's Monthly Summary Pesticide Use Report form (which may be obtained from the county agricultural commissioner) or on a format approved by the Director. The report must include the following:

1. The name and address of the person or business/organization who applied the pesticide(s).

2. County where the pest control was performed.

3. Month and year of the pesticide use.

4. Crop, commodity or site treated, except when using a designated use code, as specified on the Monthly Summary Pesticide Use Report form.

5. The pesticide, including the U.S. EPA or State Registration Number which is on the pesticide label, and the amount used.

6. Number of applications made with each pesticide and the total number of applications made during the month.

7. Total acres or units treated with each pesticide, except when using a designated use code, as specified on the Department's Monthly Summary Pesticide Use Report form.

Negative Pesticide Use Reports. During any month a licensed Maintenance Gardener Pest Control Business performs no pest control work in a county where the business is registered, a negative Pesticide Use Report must be submitted to the county agricultural commissioner by the tenth day of the following month. If the report is mailed, the postmark is the date of delivery.

Violations. It is unlawful for any person who performs pest control incidental to a maintenance gardening business to do any of the following:

- Operate without first having obtained a pest control business license in the Maintenance Gardener Pest Control category from the Director.

- Make any false or fraudulent record or report.

- Operate in any county without first having registered with the county agricultural commissioner.

- Operate equipment with incompetent or unqualified persons in charge of the equipment.

- Use any fraud or misrepresentation in making application for a license or for a renewal of a license.

No Fee Pest Control Business License

A person **not** regularly engaged in the business of pest control, who operates only in the vicinity of his/her own property and for the accommodation of his/her neighbors, is not

required to pay the license fee; however, they are required to obtain the Pest Control Business License. The Pest Control Business License flow chart is described in ***Appendix IV-3***.

Before a person can apply for this license, he/she must obtain a Qualified Applicator License by passing an examination in laws and regulations pertaining to pesticides and pest control operations, basic safety principles, and in one or more of the categories listed in ***Table 4-1 on page IV - 2***, depending on the type of pest control to be conducted. Usually, this is the Plant Agriculture pest control category. Continuing education hours are required prior to renewal of the Qualified Applicator License. The applicant must pay a fee to obtain the required Qualified Applicator License. If an individual wants to apply for the no-fee business license, he/she should contact the local county agricultural commissioner to obtain the appropriate application form and further instruction.

Structural Pest Control Operator and Field Representative Licenses

Structural Pest Control Operators are licensed by the Department of Consumer Affairs, Structural Pest Control Board (SPCB). The SPCB issues the following two types of licenses:

1. **Operator** - A structural pest control operator is any person licensed by the SPCB, to practice structural pest control work for hire. See ***Appendix IV-6*** for the Structural Pest Control Board Operator flow chart.

2. **Field Representative** - A Structural Pest Control Field Representative is any individual who is licensed by the SPCB to secure structural pest control work, identify infestations or infections, make inspections, submit bids, or otherwise contract, on behalf of a registered company. A Field Representative may not contract for pest control work or perform pest control work in his/her own behalf. However, a licensed Field Representative may use or supervise the use of a pesticide that is classified as a restricted material. See ***Appendix IV-7*** for the Structural Pest Control Board Field Representative flow chart.

Both the Operator and Field Representative Licenses are issued in the following four branches:

1. Branch I, Fumigation - Control of household and wood-destroying pests by fumigation with poisonous or lethal gases.

2. Branch II, General Pest Control - Control of household pests, excluding fumigation with poisonous or lethal gases.

3. Branch III, Termite Control - Control of wood-destroying pests by use of insecticides or structural repairs and corrections, excluding fumigation with poisonous or lethal gases.

4. Branch IV, Wood Roof Cleaning and Treatment.

Both licenses must be renewed every three years on June 30th, accompanied by a fee of $150 for the structural pest control operator license, and $45 for the field representative license.

Registered Structural Pest Control Company. A structural pest control company registered with the SPCB must obtain a license to operate in any of the four branches. See ***Appendix IV-8*** for a description of the SPCB's Registered Structural Pest Control Companies.

Minimum Requirements. In order to obtain an operator's license in any one or more of the branches, the applicant must acquire a specific amount of work experience, satisfactorily pass specific courses approved by the SPCB, and successfully pass a written examination for the branch in which he/she applied. Applicants for a field representative license must submit proof to the SPCB that they have the required training and experience in the branch(es) for which they desire to be licensed. Upon completion of the required work experience, training, and passing the written examination (with a minimum passing score of 70 percent), the applicant is issued a license.

Unlicensed employees of a company registered with the SPCB must pass a written examination prior to the application of any chemical (Branch 2 or Branch 3) or wood preservative, as part of a roof restoration (wood roof cleaning and treatment). Upon passing the examination, the individual is authorized to apply the chemical or wood preservative for a period not to exceed three years, and *only under the direct supervision of a licensed structural pest control applicator*. After expiration, the individual must reapply, retake, and pass the written examination. The Board charges an examination fee of $10 per certification for each category in which an examination is taken. At present, the law does not allow the applicator to apply any chemical substance in Branch 1 - Fumigation. See ***Appendix IV-9*** for additional General Applicator Information.

Continuing education hours are required prior to license renewal.

County Registration. Once a person secures a Structural Pest Control Business License, he/she must register with the agricultural commissioner in each county in which the business intends to perform pest control, prior to conducting such work. Most counties require a fee for registration. The fee applies to the registration of the principal office location and each branch office location.

Monthly Summary Pesticide Use Reports. Structural Pest Control Operators are required to maintain pesticide use records and must report a monthly summary of pesticide use to the county agricultural commissioner of the county in which the work was performed, by the tenth day of the month following the month in which the work was performed. The report must be made on a form approved by the Director, and shall contain the name and registration number of each pesticide, the amount used, and the number of applications made. If the report is mailed, the postmark is the date of delivery. Each pesticide use report, or combination of use reports representing a registered structural pest control company's total county pesticide use for the month, shall have affixed to the report form a pesticide use stamp issued by the Board, as the pesticide use report filing fee. The SPCB shall provide for the sale of these stamps, and refund money paid for stamps which are returned unused.

Negative Pesticide Use Reports. During any month a licensed Structural Pest Control Operator performs no pest control work in a county where the business is registered, a negative Pesticide Use Report must be submitted to the county agricultural commissioner. No pesticide use stamp is required on negative use reports. If the report is mailed, the postmark is the date of delivery.

Structural Pest Control Equipment. Each person engaged in the business of structural pest control for hire must conspicuously and legibly identify each piece of equipment used for mixing or applying pesticides. Each ground rig, service rig, and similar equipment used for mixing or applying pesticides must be marked with either the business' name, or with "Licensed Pest Control Operator," "Fumigation Division," "Licensed Fumigator," or similar wording, and the pest control operator license number of the person or firm. The markings must be large enough to be readable at a distance of 25 feet.

In addition, the county agricultural commissioner may arrange to have all of the firm's pest control equipment inspected at the time of registration to ensure that it is properly marked and in proper, safe working condition.

Structural Pest Control Operator licensees and Field Representative licensees must comply with restricted materials use requirements and other applicable regulatory requirements of both the Department and SPCB.

Pest Control Dealer License

Any person (including manufacturers, distributors, or retailers) who engages in any of the following business activities is required to be licensed as a Pest Control Dealer:

1. Selling pesticides to users for an agricultural use, or selling dual use pesticides which can be used for an agricultural use or nonagricultural use.

2. Selling to users any method or device for control of agricultural pests such as biological agents, lures, or insect trapping devices.

3. Soliciting sales of pesticides by making agricultural use recommendations through field representatives or other agents.

4. Selling to a user a pesticide classified as a restricted material that requires either a permit for possession and use, or which may be used only by or under the direct supervision of a certified applicator.

Any other branch, sales yard store, or sales location which is owned and operated by the Pest Control Dealer must also be licensed as a **branch** location. Each Pest Control Dealer is responsible for the acts of each person employed by the business in the solicitation and sale of pesticides and all claims and recommendations for the use of pesticides.

A Pest Control Dealer's license is not required for a person who has a Pest Control Business License or Structural Pest Control License and sells only the pesticides they apply. Government agencies are also exempt from having to be licensed as a Pest Control Dealer. Many county agricultural commissioners sell rodenticides and bird control materials at cost to the public.

County Registration is not required at this time.

Minimum requirements. To obtain a pest control dealer license, the business must submit an application to the Director, specifying the location of the main business location, any branch sales yards, stores, or sales sites. In addition, the application must show that there are qualified individuals responsible for actively supervising all sales activities at each main and branch location. A pest control dealer's qualified person(s) may be any individual possessing one of the following licenses or certificates: a Pest Control Dealer Designated Agent License, an Agricultural Pest Control Adviser License, a Qualified Applicator License, or a Pest Control Aircraft Pilot Certificate. See ***Appendix IV-10*** for the Pest Control Dealer License flow chart.

Supervision. Each licensed Pest Control Dealer must have and maintain at the principal office and at each branch location, a designated agent to actively supervise all operations conducted by the location. The Pest Control Dealer Designated Agent License is not required if the licensed Pest Control Dealer Business and each branch is actively supervised by any one of the following: a licensed Agricultural Pest Control Adviser, Pest Control Aircraft Pilot Certificate holder (either Journeyman or Apprentice), or a Qualified Applicator Licensee. Any one of these licensees/certificate holders can be a Designated Agent for the licensed pest control dealer business.

Appropriate Products. Licensed Pest Control Dealers must sell or deliver a pesticide for which a recommendation has been provided to him/her, or written by any person employed by him/her, only when the pesticide labeling corresponds to the recommendation.

It is unlawful for a Pest Control Dealer to knowingly sell or deliver a pesticide for a use not shown in the labeling, if the labeling cannot be complied with, or if the recommendation is in conflict with the label.

Dealer Records. The Pest Control Dealer is required to prepare and maintain a record of all pesticides sold or delivered, except for pesticides labeled for home use only. These records must be maintained at the sales office for two years and be available for inspection, by purchaser name, to the county agricultural commissioner or Director upon request. The records must include the following:

1. The purchaser's name and address.

2. The pesticide and the amount purchased.

3. The date of purchase.

4. The Operator Identification Number(s) or a statement on the invoice indicating that the purchaser was not required to obtain an Operator Identification Number.

5. A copy of the adviser's written recommendation, or the following statement on the invoice or delivery slip must state, "No recommendation has been made by, or provided to, the seller concerning the use of the pesticide covered by this invoice" (or a substantially similar statement).

6. The location where the pesticide was delivered, including the name of the person or business which received the shipment, if the dealer delivered the pesticide.

If the registrant or pesticide broker is not the first person to sell into or within California, any economic poison labeled for agricultural use, the pest control dealer who first sells into or within California must pay to the Director of the Department of Pesticide Regulation, a mill assessment of twenty-two mills (2.2 cents) per dollar of sales. The assessment must be reported quarterly to the Director. Records of purchases, sales, and distributions of economic poisons into or within this State must be maintained for a period of four years.

Supplemental Labeling. When a recommended pesticide usage is included only in the registered supplemental labeling, both the written recommendation and the registered supplemental labeling must be delivered by the dealer to the applicator in sufficient time to allow the applicator to properly prepare for the application.

Dealer Responsibilities. It is extremely important that a dealer know which pesticides are restricted and require a permit. For instance, a permit for possession or use is not required when a federally restricted material is only included in Food and Agricultural Code Section 6400(b), or is possessed or used by, or under the supervision of, a certified commercial applicator unless otherwise required by the commissioner; however, a permit is required when the material will be possessed or used by a certified private applicator. Each licensed pest control dealer who sells a restricted material that requires a permit for its use or possession must obtain a copy of the permit before sale or delivery.

A federally restricted material or a chemical designated as having the potential to pollute ground water when labeled for agricultural, outdoor institutional, or outdoor industrial use, that does not require a permit for possession or use must be sold or delivered only to a certified applicator. The dealer must, before sale or delivery, obtain from the purchaser a copy of his/her qualified applicator license or certificate, or a signed statement in substantially the following form:

I am a certified commercial applicator authorized by the scope of my _____ license/ certificate, Number ____, to use the restricted material(s) I am purchasing. My license/certificate is valid until _____.
(date)

_____ _____
Certified Applicator's Signature Date

Periodically, the county agricultural commissioner will inspect the dealer's records to ascertain licensing status, supervision by a qualified person, record maintenance, sales/ delivery of appropriate pesticides, and other record requirements.

Dealer Requirements for Ground Water Protection Materials. Refer to Chapter X - Ground Water Protection.

Dealer Requirements for Antifouling Paints or Coatings Containing Tributyltin. Antifouling paints or coatings containing tributyltin may be applied only to, and sold only for:

1. Aluminum vessel hulls.

2. Vessel hulls 82 feet or more in length.

3. Outboard motors and lower drive units.

Except as provided above, antifouling paints or coatings containing tributyltin may not be applied to any surface or object that will come into contact with the fresh water or marine environment. This prohibition includes, but it not limited to, use on docks, piers, nets, and other fishing equipment.

Prior to sale, the Pest Control Dealer must obtain a copy of the vessel registration to verify the vessel use requirements specified in 1 or 2 above. If no vessel registration exists, or the paint or coating will be applied to an outboard motor or lower drive unit, the Pest Control Dealer must obtain a sworn statement to verify the use requirements specified in 1, 2, or 3 above. The sworn statement must be made in substantially the following form:

> I, (name of certified applicator), declare under penalty of perjury that the antifouling paint or coating containing tributyltin that I am purchasing shall be applied only to an aluminum vessel hull; a vessel hull 82 feet or more in length; or an outboard motor or lower drive unit. The serial number of the vessel is _____.
>
> _____ _____
>
> Signature of Certified Applicator Date

The dealer must prepare and maintain the following records for all sales of antifouling paints that contain tributyltin:

1. Name and address of vessel owner.

2. Name and certificate number of the certified commercial applicator (certified in Category M - antifouling - Tributyltin).

3. Location of the vessel where the application is to be made.

4. Date of sale and quantity sold.

5. A copy of the vessel registration or sworn statement verifying the vessel length or vessel hull composition requirements, or intended use on an outboard motor or lower drive unit and registration number. If no registration number exists, the vessel serial number must be included.

The dealer must maintain the records specified above in a separate log of sales for two years and the records must be available for inspection by the county agricultural commissioner or the Director upon request.

Pest Control Dealer Designated Agent License

Each licensed Pest Control Dealer must have and maintain at the principal office and at each branch location, a designated agent to actively supervise all operations conducted by the location. The designated agent is a person who has passed the laws and regulations examination and possesses a valid Pest Control Dealer Designated Agent License. The designated agent is responsible for supervising the operations at the principal or branch location. The Pest Control Dealer Designated Agent License flow chart is shown in ***Appendix IV-11***.

Minimum Qualifications. Before an initial license is issued or a license is issued to a person who has not possessed a valid Pest Control Dealer Designated Agent License within the last 12 months, the applicant must pass an examination to demonstrate his/her knowledge of the laws and regulations governing the use and sale of pesticides and the responsibilities in carrying on the business of a pest control dealer.

Continuing Education. No continuing education is required at this time for the renewal of this license.

Denial, Revocation, or Suspension of a Pest Control Dealer Designated Agent License. A Pest Control Dealer Designated Agent License may be denied, revoked, or suspended by the Director after a hearing for any of the following:

- Failure to notify the Director in writing of any change of address.
- Failure to comply with the laws and regulations relating to pesticides.
- Making false or fraudulent statements, or misrepresenting or failingto disclose any material fact in making an application for a license or renewal of a license.
- Making any false or misleading statements in any written record or report relating to pesticides, or involving the Pest Control Dealer Business where that person is, or was, employed.

Pesticide Broker License

Any person, whether out-of-state or in California, engaged in the sale and/or distribution into or within California of California-registered economic poisons (pesticides) that are labeled for agricultural use, must be licensed as a pesticide broker. (Exceptions: Registrants selling their own California-registered, agricultural use economic poisons and licensed pest control dealers.) See ***Appendix IV-12*** for the Pesticide Broker License flow chart.

Records of the broker's purchases and sales and distributions of economic poisons into or within California must be retained for four years and made available to the county agricultural commissioner or Director upon request.

Continuing Education. No continuing education is required at this time for the renewal of this license.

County Registration is not required at this time.

Denial, Revocation, or Suspension of a Pesticide Broker License. A Pesticide Broker License may be denied, revoked, or suspended by the Director, after a hearing, for any of the following:

- Failure to notify the Director, in writing, of any change of address.
- Failure to comply with the laws and regulations relating to pesticides.
- Making false or fraudulent statements, or misrepresenting or failing to disclose any material fact in making an application for a license or renewal of a license.
- Making any false or misleading statements in any written record or report relating to pesticides.

Qualified Applicator License

The Qualified Applicator License is primarily for individuals who supervise the pest control operation of a licensed Pest Control Business; however, a person with this license may also use or supervise the use of pesticides under a licensed Maintenance Gardener Pest Control Business, if they are qualified in the Landscape Maintenance Pest Control Category.

Minimum Requirements. Before an initial Qualified Applicator License is issued, or before a license is issued to a person who has not possessed a valid Qualified Applicator License within the last 12 months, the applicant must pass the examinations necessary to obtain the license. This will include an examination on the requirements of laws and regulations governing pesticide use, and the applicant shall elect to be examined in one or more of the categories listed in ***Table 4- 1 on page IV - 2***, depending on the type of pest control to be

conducted by the business. A Qualified Applicator Licensee may use or supervise the use of any pesticide (restricted or general) only in the category(ies) in which he or she has been found to be qualified through the examination process. See ***Appendix IV-1***.

Continuing Education Requirements. A Qualified Applicator License cannot be renewed unless the licensee has completed, within each two-year license renewal period, a minimum of **20 hours** of Department-approved pest management and pesticide instruction. Included in the 20 hours of instruction must be at least **four hours** pertaining to pesticide laws and regulations.

A Qualified Applicator Licensee who has only the Landscape Maintenance Pest Control Category (Category B), and possesses or is the qualified applicator under a valid Maintenance Gardener Pest Control Business License must have a minimum of **eight hours** of Department-approved pest management and pesticide instruction for each two-year license renewal period. Included in the eight hours of instruction must be at least **two hours** pertaining to pesticide laws and regulations.

A Qualified Applicator Licensee who has only the Seed Treatment Pest Control Category (Category H) must have a minimum of **four hours** of Department approved pest management and pesticide instruction for each two-year license renewal period. Included in the 4 hours of instruction must be at least **two hours** pertaining to pesticide laws and regulations.

The **continuing education record keeping requirements** for all licensee and certificate holders are addressed later in this Chapter.

County Registration. Once a person secures a Qualified Applicator License, he/she must register with the agricultural commissioner in each county in which he/she intends to perform pest control, prior to conducting such work. Most counties require a fee for registration. The fee applies to the registration of the principal office location and each branch office location.

Denial, Revocation, and Suspension of a Qualified Applicator License. A Qualified Applicator License may be denied, revoked, or suspended by the Director, after a hearing, for any of the following:

- Failure to adequately supervise the use of a restricted material.
- Failure to comply with the laws and regulations governing pesticides and the use of pesticides.
- Making any false or fraudulent record or report.

Qualified Applicator Certificate

The Qualified Applicator Certificate is required of individuals who use, or supervise the use of, a restricted use pesticide, or for individuals who use, or supervise the use of, any pesticide,

if the governmental agency or private business requires it for their employees. Persons who possess this certificate cannot engage in the business of pest control for hire, with the exception of a Qualified Applicator Certificate holder with only the Landscape Maintenance Pest Control Category who possesses or is the qualified applicator under a valid Maintenance Gardener Pest Control Business License. The Maintenance Gardener Pest Control Business License is limited to the Landscape Maintenance Pest Control Category in which the primary work is landscape maintenance and the application of pesticides is **incidental** to the maintenance of ornamental and turf plantings indoors, in commercial parks, or surrounding structures.

Minimum Requirements. Before an initial Qualified Applicator Certificate is issued, or before a certificate is issued to a person who has not possessed a valid Qualified Applicator Certificate within the last 12 months, the applicant must pass the examinations necessary to obtain the certificate. This will include an examination on the requirements of laws and regulations governing pesticide use; the applicant shall elect to be examined in one or more of the categories listed in ***Table 4-l on page IV - 2***, depending on the type of pest control to be conducted. A Qualified Applicator Certificate holder may use or supervise the use of any pesticide (restricted or general) only in the category(ies) in which he/she has been found to be qualified through the examination process. ***See Appendix IV-2.***

Continuing Education Requirement. A Qualified Applicator Certificate cannot be renewed unless the certificate holder has completed, within each two-year certificate renewal period, a minimum of **20 hours** of Department-approved pest management and pesticide instruction. Included in the 20 hours of instruction must be at least **four hours** pertaining to pesticide laws and regulations.

A Qualified Applicator Certificate holder who has only the Landscape Maintenance Pest Control Category (Category B) and possesses or is the qualified applicator under a valid Maintenance Gardener Pest Control Business License must have a minimum of **eight hours** of Department approved pest management and pesticide instruction for each two-year certificate renewal period. Included in the eight hours of instruction must be at least **two hours** pertaining to pesticide laws and regulations.

A Qualified Applicator Certificate holder who has only the Seed Treatment Pest Control Category (Category H) must have a minimum of **four hours** of Department approved pest management and pesticide instruction for each two-year certificate renewal period. Included in the 4 hours of instruction must be at least **two hours** pertaining to pesticide laws and regulations.

The **continuing education record keeping requirements** for all licensee and certificate holders are addressed later in this Chapter.

Denial, Revocation, and Suspension of Qualified Applicator Certificate. A Qualified Applicator Certificate may be denied, revoked, or suspended by the Director, after a hearing, for any of the following:

- Making any false or fraudulent record or report.
- Failure to adequately supervise the use of a restricted material.
- Failure to comply with the laws and regulations governing pesticides and the use of pesticides.

Aircraft Pilot's Pest Control Certificate

Any person who performs pest control while operating an aircraft must hold a valid Aircraft Pilot's Pest Control Certificate issued by the Director, a valid commercial pilot's certificate, a current medical certificate issued by the Federal Aviation Administration (FAA), and meet all other FAA requirements.

There are two types of pilot certificates: Apprentice and Journeyman. Before an initial certificate is issued, the applicant must pass an examination to demonstrate his/her ability to legally and safely conduct aerial pest control operations, and his/her knowledge of the nature and effect of materials which are used in pest control. See ***Appendix IV-13*** for the Pest Control Aircraft Pilot License flow chart.

Minimum Requirements for the Apprentice Pilot. A person first starting to do aerial pest control applications in California will be issued an apprentice certificate after passing the examination. The certified apprentice pilot may conduct pest control activities only under the direct and personal supervision of a person that holds a valid journeyman's certificate. The Journeyman Pilot responsible for the supervision of an apprentice pilot must be aware of the conditions at the application site, and be available to direct and control the manner in which applications are made by the apprentice pilot. The availability of the journeyman shall be directly related to the actual or potential hazard of the situation.

Minimum Requirements for the Journeyman Pilot. An apprentice pilot may take the examination to become a journeyman pilot after completing a minimum of 150 hours of pest control in a fixed-wing aircraft, or 50 hours of pest control in a nonfixed-wing aircraft within the past two calendar years. Also, the apprentice pilot must have the journeyman pilot who supervised him/her complete and sign a "Statement of Supervision" and return the statement with the application when applying to take the Journeyman Pilot Examination.

In addition, the examination for the Journeyman Pilot Certificate cannot be given to any pilot currently licensed unless he/she has been licensed as an apprentice pilot for at least one year.

Pesticide Handling by Pilots. Pilots operating a pest control aircraft must not transfer, mix, or load liquid Category I or II pesticides containing organophosphates or carbamates unless a closed system is used.

County Registration. Each year, before a pest control pilot can operate in any county, the pilot must register with the county agricultural commissioner. An apprentice pilot must

include, in each county of registration, the name of the journeyman pilot responsible for providing supervision of his/her pest control activities. The journeyman pilot named on the apprentice pilot's county registration must also be currently registered with that county.

The apprentice pilot must immediately notify the county agricultural commissioner and amend the registration in the event the journeyman pilot named on the apprentice's registration is no longer able to provide the supervision.

The county registration may be accomplished by registering in person in one county then registration with any other county may be done by mail. The County Board of Supervisors may set fees for registration not to exceed $10 for a pilot registering in the first county and $5 for each additional county. The appropriate forms for registration by mail may be requested from the county agricultural commissioner where the pilot registers in person.

Continuing Education Requirements. A Pest Control Aircraft Pilot Certificate cannot be renewed unless the pilot has completed, within each two-year certificate renewal period, a minimum of **20 hours** of Department approved pest management and pesticide instruction. Included in the 20 hours of instruction must be at least **four hours** pertaining to pesticide laws and regulations, and **four hours** pertaining to application equipment and techniques.

The **continuing education record keeping requirements** for all licensees and certificate holders are addressed later in this Chapter.

Denial, Revocation, and Suspension of Aircraft Pilot's Pest Control Certificate. The Director may refuse to issue a Certificate to any Pest Control Aircraft Pilot, and may revoke or suspend the Certificate of any such pilot, after a hearing, for any of the following:

- The pilot is not qualified to conduct the pest control operations in accordance with the Certificate.
- The pilot does not hold an appropriate and valid commercial pilot's certificate and a current appropriate medical certificate issued by the FAA.
- The pilot has violated any provision of the laws and regulations pertaining to pesticides, any industrial safety order of the Department of Industrial Relations, or has not complied with any order of the county agricultural commissioner or the Director.

The Director may also condition the Certificate of any pest control aircraft pilot if the Director finds that the continuance of the Certificate endangers public welfare or safety.

Agricultural Pest Control Adviser

The following persons, unless exempt, must be licensed as Agricultural Pest Control Advisers:

1. Any person who provides pest control recommendations concerning any agricultural use.

2. Any person who offers himself/herself as an "authority" on any agricultural use.

3. Any person who solicits services or sales outside of a fixed place of business for agricultural use.

Exemptions. Exempt from the adviser licensing requirements are: officials of federal, State, and county departments of agriculture; University of California personnel; and officials of special park and recreation districts, provided their recommendations are to specific applications on specific parcels and in writing.

Minimum Qualifications. A person who has never possessed a valid California Pest Control Adviser's License cannot be issued a license unless he/she meets the minimum qualifications listed below and passes the examination. A person who has not possessed a valid California Pest Control Adviser License within the last 12 months cannot be issued a license unless he/she reexamines and passes the examination.

1. Have either a Bachelor's Degree (Bachelor of Arts or Bachelor of Sciences degree) in Agricultural Sciences, Biological Sciences, or Pest Management; or

2. Have 60 semester units (90 quarter units) of college-level curriculum in the Agricultural Sciences, Biological Sciences, or Pest Management, plus two years of technical experience as an assistant to a licensed Agricultural Pest Control Adviser, or other equivalent experience.

The nature of such technical experience must be equivalent to work as:

- An assistant to a pest management specialist.
- A field sweeper.
- A field checker or scout.
- A participant in field or lab research activities relating to pest control.
- A participant in agricultural pest control/management activities at the federal, State, or county level.
- A qualified person (Qualified Applicator Licensee) employed by a licensed Pest Control Business (no more than 12 months experience solely in Landscape Maintenance Pest Control Category or Health Related Pest Control Category shall be used).
- An authorized licensee listed on a Structural Pest Control Operator License (no more than 12 months work experience as a licensed Structural Pest Control Operator shall be used).
- A farm operator.

The applicant must submit an official transcript from colleges or universities that he/she attended.

In addition to either Number 1 or 2, the college-level curriculum must include the following:

- 12 semester/18 quarter units of biological science courses, including one chemistry course;
- 18 semester/27 quarter units of agricultural science courses, including both production and pest management courses; and
- 9 semester/13.5 quarter units of agricultural science, biological science, pest management and/or chemistry courses.

A total of 39 semester units or 58.5 quarter units.

Adviser Licensing Categories. Agricultural Pest Control Advisers may make recommendations only in categories in which they have been found to be qualified through the examination process. See ***Table 4-2***, below.

Table 4-2. Agricultural Pest Control Adviser Categories:

(A)	Insects, Mites, and Other Invertebrates (Plant or Animal).
(B)	Plant Pathogens.
(C)	Nematodes.
(D)	Vertebrate Pests.
(E)	Weed Control.
(F)	Defoliation.
(G)	Plant Growth Regulation.

An overview of the Agricultural Pest Control Adviser License flow chart is in ***Appendix IV-14***.

County Registration. Before an adviser can make an agricultural use recommendation in any county, the adviser must register with the county agricultural commissioner. The registration must be renewed annually. This may be accomplished by first registering in person with the county agricultural commissioner in the county as indicated by the address on the adviser's license. If the address of the adviser is not within California, the registration must be in the county of occupational choice.

At the time of registration, the adviser must tell the county agricultural commissioner where his/her written recommendations will be available for review. This information will be written on the adviser's county registration form. Registration in any additional county may be made by mail, if allowed by the county agricultural commissioner of the county. The

additional registration by mail must be made on prescribed forms which may be obtained and processed in the county as indicated by the address on the adviser's license or the county of occupational choice, as the case may be.

The County Board of Supervisors may set fees for registration not to exceed $10 per year for an adviser to register in person in the county indicated by the address on the adviser's license or the county of occupational choice and $5 per year for each additional county registration whether it be by mail or in person.

Recommendations. All agricultural use recommendations must be in writing; one copy of each written recommendation must be signed and dated and furnished to the operator of the property prior to the application. Where a pesticide use is recommended, a copy must also be furnished to the dealer and the applicator prior to the application. Each recommendation must include, when applicable, the following:

1. The name and dosage of each pesticide to be used or description of method recommended. (Recommendations are not always for the use of a pesticide.)

2. The identity of the pest to be controlled, designated by accepted common name.

3. The owner or operator of the property, location of, and acreage to be treated.

4. The commodity, crop, or site to be treated.

5. The suggested schedule, time, or conditions for the pesticide application or other control method.

6. A warning of the possibility of damages by the pesticide application that reasonably should have been known by the Agricultural Pest Control Adviser to exist.

7. Total acreage or units to be treated.

8. Concentration and volume per acre or other units.

9. Worker reentry interval, if one has been established; preharvest or preslaughter interval; and label restrictions on use or disposition of the treated commodity, by-products or treated area.

10. The criteria used for determining the need for the recommended treatment.

11. Certification that alternatives and mitigation measures that would substantially lessen any significant adverse impact on the environment have been considered and, if feasible, adopted.

12. The signature and address of the adviser; the date, and name, and address of the business the adviser represents.

Advisers must retain one copy of each written recommendation for one year following the date of the recommendation. See ***Appendix IV-15*** for an example of a Pest Control Recommendation form.

Advisories for Ground Water Protection. Each ground water protection advisory must be written and must be specific to only one chemical. The advisory may only be written by a licensed Agricultural Pest Control Adviser who has completed the Ground Water Protection Training Program approved and administered by the Department.

Advisories are written for the use of a pesticide containing Atrazine, Simazine, Bromacil, Bentazon, Diuron, and Prometon (Pramitol) when the chemical is to be used in a Pesticide Management Zone (PMZ). These chemicals are listed in 3 CCR Section 6800(a). **Note:** These chemicals are subject to change. Consult with the local county agricultural commissioner or Department for updates.

The specific information that must be included in an advisory and the record keeping requirements are addressed in Chapter X - Ground Water Protection.

Continuing Education Requirements. An Agricultural Pest Control Adviser's License cannot be renewed unless the adviser has completed, within each two-year license renewal period, a minimum of **40 hours** of Department approved pesticide or pest management instruction. The 40 hours of instruction must include at least **four hours** pertaining to pesticide laws and regulations.

Denial, Revocation, and Suspension of Adviser License and County Registration. An adviser's license may be refused, revoked, or suspended by the Director, after a hearing, for the following reasons:

- Failure to put recommendations in writing.
- Making false or fraudulent statements in written recommendations.
- Violation of applicable laws or regulations, or regulations adopted by the county agricultural commissioner. (A violation could involve making a recommendation in a category in which the adviser is not qualified, or making a recommendation in conflict with the registered label.)
- Failure to pass the examination on laws and regulations, or failure to pass at least one category examination.

The county agricultural commissioner may refuse, revoke, or suspend an adviser's county registration for these same reasons. If the county agricultural commissioner takes any disciplinary action against the registration of an adviser, the adviser may appeal to the Director, in writing, within ten days of the commissioner's decision.

Continuing Education Information and Record Keeping Requirements for Licensee and Certificate Holders

A license/certificate cannot be renewed unless the licensee/certificate holder has completed, within each two-year license/certificate period, the specified number of hours of continuing education.

The continuing education must directly pertain to pesticides and pest management. Sales-oriented courses are not acceptable. The requirement of the continuing education is designed to augment the proficiency of advisers and applicators, and assure that they have up-to-date knowledge of pesticide laws and regulations, pesticides, and pest management.

The Department-approved instruction is provided through public and private sources. Some of the public sources include city and State colleges, universities, the U.C. Cooperative Extension Service, and the county agricultural commissioner's office. Private sources of Department-approved instruction are provided by industry professional organizations, private businesses specializing in pest management training, etc. A listing of Department-approved instruction is available through the county agricultural commissioners' office, the U.C. Cooperative Extension Service, and the Department's Pesticide Enforcement Branch. Also, many industry professional organizations receive an updated list of the Department-approved instruction.

The instructor or sponsoring organization of approved continuing education courses must maintain for three years a record of licensees and certificate holders who successfully completed the course or program. The record must contain the same information that licensees/certificate holders are required to maintain.

Record Keeping. Each license/certificate holder is required to maintain a record for three years of all approved continuing education courses acquired during each license/certificate period. The records must include the following:

1. Certificate holder's/licensee's name.
2. Certificate/license number.
3. Title and location of the instruction.
4. Name of the instructor or sponsoring organization, and hours of credit.
5. Identification Code Number assigned to the course or program by the Director or Regional Accreditation Committee.

A certificate of course completion or written statement, containing the information specified in numbers 1-5 above, issued by the course instructor or sponsoring organization, is sufficient to meet the record keeping requirements. Licensees/certificate holders will be required to

Individuals whose last name begins with a letter between M-Z, and businesses with the business name beginning with the letter M-Z, expire in odd-numbered years, i.e., 1995, 1997, 1999, etc.

DPR will mail out renewal applications prior to the expiration of the license or certificate, normally in mid-October. Completed renewal applications must be postmarked by December 31 to avoid a $10.00 late penalty. In order to receive a license or certificate prior to January 1, a completed renewal application, and the appropriate fee, must be submitted to the Department prior to December 1. (All required continuing education hours must be completed at the time of submission of the application; a license/certificate will not be renewed unless this requirement has been satisfied.)

A person who has not met the continuing education required for renewal of a license or certificate by its expiration date have one year from the date of license/certificate expiration to obtain the continuing education.

A person who has not possessed a valid license/certificate within 12 months of the date of application for that same kind of license/certificate must pass the examinations before the license/certificate will be issued.

A license or certificate, including a renewal, is not valid until it has been issued by the Department.

Note: The issuance of a two-year license or certificate, including a renewal, in no way affects any annual county registration requirement.

Applicator Responsibilities

Any person who applies pesticides either for hire or for his/her own personal use must do the following:

1. Use only pest control equipment that is in good repair and safe to operate.

2. Perform all pest control in a careful and effective manner.

3. Use only methods and equipment suitable to ensure proper application of pesticides.

4. Perform all pest control under climatic conditions suitable to ensure proper application of pesticides.

5. Exercise reasonable precautions to avoid contamination of the environment.

6. Have available at each use site a copy of the registered labeling that allows the manner in which the pesticide is being used.

7. Measure or weigh concentrated pesticides accurately, using only devices that are calibrated to the smallest unit in which the pesticide is being weighed or measured.

8. Maintain a uniform mixture, at all times, in both application and service rigs.

9. Clean pest control equipment thoroughly, when necessary, to prevent illness or damage to persons, plants, or animals from residues of pesticides previously used in the equipment.

10. Avoid contamination of water drawn from an outside source by equipping each piece of application equipment and service rig that handles pesticides and draws water from an outside source with an air-gap separation, reduced pressure principle back-flow prevention device or double-check valve assembly that is acceptable to both the water purveyor and the local health department.

Age Requirement

No person (employee or non-employee) under 18 years of age is permitted to mix or load a pesticide when labeling or regulation requires the use of either air supplied respiratory protection, a closed system, or full-body chemical-resistant clothing.

Protection of Persons, Animals, and Property

An applicator, prior to and while applying a pesticide, must evaluate the equipment to be used, the meteorological conditions, the property to be treated, and its surrounding properties to determine the likelihood of harm or damage. Notwithstanding that substantial drift will be prevented, no pesticide application is permitted to be made or continued by anyone when:

1. There is a reasonable hazard of contamination of the bodies or clothing of persons not involved in the application process.

2. There is a reasonable possibility of damage to nontarget crops, animals, or other public or private property.

3. There is a reasonable possibility of contamination of nontarget public or private property, including the creation of a health hazard, preventing the normal use of such property.

Conflict with Labeling (Illegal Pesticide Use)

No pesticide may be used, stored, handled, or recommended for use in conflict with its registered labeling. Any deviation from instructions, requirements, or prohibitions of the registered pesticide labeling concerning storage, handling, and use, or deviation from any additional conditions of permit issued by the county agricultural commissioner or Director, is prohibited, with the exception of the following:

1. A decrease in dosage rate per unit treated.

2. A decrease in the concentration of the mixture applied.

3. An application made at a frequency less than specified.

4. Use to control a target pest not listed on the label, provided the application is to a commodity/site listed on the label and the use of the product against an unnamed pest is not expressly prohibited.

5. Employing a method of application not prohibited, provided other label directions are followed.

6. Mixing with another pesticide or with a fertilizer, unless such mixture is prohibited.

7. An increase in the concentration of the mixture applied, provided it corresponds with the current published recommendations of the University of California.

See ***Appendix I-3***, Agricultural Civil Penalties: Types and Frequency of Sections Cited. Label violations rank number two.

Pesticide Labeling

Read the Label. The importance of reading and following the label directions cannot be over emphasized. The information that appears on the label enables people to know how to use the pesticide product and to know what precautions must be taken. Pesticides must be used only as stated on the label and/or as provided by the Director's and commissioner's regulations. When a pesticide is recommended, sold, or used, be sure the usage is included in the labeling. If a recommendtion is for a usage which is in the form of a product bulletin or other labeling not printed on the container labeling, the bulletin or other labeling must be registered with the U.S. Environmental Protection Agency and the Department, and be provided with the pesticide so that the user will have all necessary use instructions and precautions.

Availability of Labeling. A copy of the registered labeling that allows the manner in which the pesticide is being used must be available at each use site, or the applicator is in violation of the law and may be jeopardizing his/her license, certificate, or permit, and is subject to fines.

Protection of Bees

Notification to Beekeepers. When using pesticides known to be toxic to bees on blossoming plants, special procedures must be followed. Such pesticides include those specified as either highly or moderately toxic by the University of California (a list is available from the University or farm advisor) and those pesticides specified as being toxic to bees by the

pesticide labeling. Each person intending to apply such a pesticide to a blossoming plant must consult with the commissioner prior to the application to determine whether any beekeeper with apiaries within one mile of the application site has requested notice of such application. If notice has been requested, the applicator must notify the beekeeper at least 48 hours in advance of the application, of the time and place the application is to be made, the crop and acreage to be treated, the method of application, the name and dosage rate of the pesticide to be applied, and how the person performing pest control may be contacted by the beekeeper. The 48-hour time may be increased or decreased by the county agricultural commissioner or by agreement of both beekeeper and person performing the pest control work.

Notification Region. Butte, Glenn, and Tehama Counties have been established as a region for the notification of apiary owners of pesticide applications by pest control operators who are registered with the county agricultural commissioners (of any of these counties) and are required to give notification to beekeepers. The agricultural commissioner of Glenn County serves as the coordinator for the region. Pest control operators must pay a $75 annual fee to the coordinator when the operator registers with any of the county agricultural commissioners in the region.

Citrus/Bee Protection Area. The areas within one mile of any citrus planting of one acre or more in Fresno, Kern, and Tulare Counties have been designated as citrus/bee protection areas. Special bee protection requirements apply in these counties. Beekeepers, dealers, advisers, and pesticide applicators in these counties should consult with the county agricultural commissioner for further information.

Agricultural Pest Control Advisory Committee

The California Food and Agricultural Code provides for a committee to advise the Director on all matters concerning the licensing, certification, and regulation of persons and firms licensed or certified pursuant to Division 6 of the code, to make agricultural use recommendations, sell certain pesticides, or apply pesticides. The Committee is comprised of 14 members representing the Agricultural Pest Control Advisers, Pest Control Business Licensees, Maintenance Gardener Pest Control Licensees, Aircraft Pilot Pest Control Certificate Holders, Pest Control Dealers, Qualified Applicator Certificate Holders, pesticide registrants, California Agricultural Commissioners Association, University of California, Division of Agriculture and Natural Resources, Board of Trustees of the California State University System, Board of Governors of the California Community College System, producers, the general public, and the California Department of Food and Agriculture.

Review Questions

1. Who is required to be licensed as an Agricultural Pest Control Adviser?

2. What type of recommendation is required to be in writing?

3. An Agricultural Pest Control adviser must give a copy of each recommendation to whom? How long must the adviser keep a copy of the written recommendation?

4. Name the eleven items required to be included in a written recommendation.

5. Any licensed Agricultural Pest Control Adviser may write a ground water protection advisory.

   True or False

6. How many hours of experience, under the supervision of the journeyman pilot, are required before an apprentice pilot is eligible to take the examination for the Journeyman Pest Control Aircraft Pilot Certificate?

7. Pilots operating an aircraft must not transfer, mix or load _____ or _____ pesticides containing _____ or _____, unless a closed system is used. (Fill in the blanks.

8. Pilots are required to have 20 hours of continuing education during each two-year renewal period. What specific topics and how many hours are required be included in the 20 hours?

9. When is a person required to be licensed as a Pest Control Dealer?

10. What are the supervision requirements for a licensed Pest Control Dealer?

11. A Pest Control Dealer is required to maintain records of all pesticides sold or delivered, except pesticides which are labeled for home use only. What information must be included in the records?

12. What must a Pest Control Dealer do prior to the sale of a restricted material which requires a permit for possession or use?

13. Prior to the sale or delivery of a federally restricted material, what must a Pest Control Dealer obtain from the certified commercial applicator?

14. What is the responsibility of the designated agent for a licensed Pest Control Dealer?

15. How must each person engaged in the business of pest control for hire identify each piece of equipment?

16. A person engaged in the business of pest control for hire must report any accidental release or spill of pesticide to the county agricultural commissioner within what time frame?

17. Who is required to give Notice of a pesticide application?

18. When is a Completion Notice required? Who is required to give the Completion Notice?

19. What type of license is required for a person who supervises the pest control operations of a Pest Control Business?

20. Persons who possess the Qualified Applicator Certificate may not engage in the business of pest control for hire, with the exception of whom?

21. Which of the following uses would be in conflict with the labeling?

    a. Make an application at a frequency less than specified.
    b. Decrease the concentration of the mixture applied.
    c. Employ a method of application not prohibited on the pesticide label.
    d. Increase the dosage rate per unit treated.

22. Each person intending to apply a pesticide known to be toxic to bees must consult with the:

    a. University of California.
    b. Department of Pesticide Regulation.
    c. County Agricultural Commissioner.
    d. County Farm Adviser.

23. Under what circumstances is a person under the age of 18 prohibited from using pesticides?

24. What must an applicator evaluate prior to a pesticide application?

25. By what date must the license or certificate renewal applications be postmarked in order to avoid a late penalty?

26. Are all the required continuing education hours the same for each license or certificate?

27. Who is responsible for maintaining the continuing education records? How long must the records be maintained?

28. What are the five items that must be included in the continuing education records?

29. A copy of the registered labeling that allows the manner in which the pesticide is being used must be available where?

30. Whose responsibility is it to ensure that all pest control is performed in a careful and effective manner?

31. It is the applicator's responsibility to thoroughly clean the pest control equipment to prevent illness or damage to persons, plants, or animals from residues of pesticides previously used in the equipment.

    True or False

32. What are the six items of information that must be maintained in the pesticide use records for each pest control operation?

33. How long must the pesticide use records for each pest control operation be retained?

34. There are six additional items of information for the pesticide use records that a Pest Control Business must maintain. Three of the items are: (1) the Operator Identification Code Number; (2) the Site Identification Code Number issued to the operator of the property treated; and (3) total acreage or units at the site. What are the other three items?

35. Within how many days of completion of the pesticide application is a Pest Control Business required to report the use of pesticides applied by it for the production of an agricultural commodity? To whom is the report submitted?

36. How must a Maintenance Gardener Pest Control Business report the use of pesticides to the county agricultural commissioner in which the pest control was performed? What is the time frame in which the report must be submitted?

Chapter V. Pesticide Storage, Transportation and Disposal

Pesticides and used pesticide containers may cause injury to persons, animals, or the environment if improperly stored, transported, handled, or disposed. Therefore, the California Food and Agricultural Code provides that pesticides and containers that holds or has held pesticides must be stored, transported, handled, and disposed of in accordance with regulations adopted by the Director. The county agricultural commissioner may take possession of unattended pesticides or emptied pesticide containers that present a hazard to persons, animals (including bees), food, feed, crops or property.

Pesticide Storage Requirements

Storage. Each person who controls the use of any property or premises is responsible for all containers and equipment on the property that hold, or have held, a pesticide. To avoid contact by unauthorized persons, if such containers and/or equipment are not under personal control, he/she must do either of the following:

1. Provide a person to maintain control over the pesticide containers at all times; or

2. Store the pesticide containers in a locked enclosure. In the case of liquid material packaged in a container larger than 55 gallons, the container does not have to be in a locked enclosure if the closure on the container is locked.

Pesticides must be stored in accordance with the storage requirements as stated in the pesticide labeling, and in accordance with the labeling on all other products, including non-pesticidal products, which are held in the same storage area

Warning Signs. When a storage area contains pesticides that are labeled with either the signal word WARNING or DANGER, a warning sign visible from any direction of probable approach must be posted around the storage area. The lettering on the warning sign must be of such size that it is readable from a distance of 25 feet.

The warning sign must be repeated in a language other than English when it may reasonably be anticipated that persons who do not understand the English language will approach the pesticide storage area.

Figure 5-1 on the following page shows an example of the warning sign.

Figure 5-1. Warning signs similar to the one shown below, must be posted around pesticide storage areas that contain pesticides with either the signal word DANGER or WARNING.

DANGER

POISON STORAGE AREA

ALL UNAUTHORIZED PERSONS KEEP OUT

KEEP DOOR LOCKED WHEN NOT IN USE

Pesticide Container Requirements

Service Container Labeling. Any container, except service containers, that holds or has held pesticides, when stored or transported, must carry the registrant's label. A service container is any container, other than the original labeled pesticide container, that is used to hold, store, or transport pesticides or use-dilutions of pesticides. Each service container, other than those used by a person engaged in the business of farming when the containers are used on the property the person is farming, must carry labeling that includes the following:

1. Name and address of the person or firm responsible for such container.

2. Identity of the pesticide contained within.

3. The signal word DANGER, WARNING, or CAUTION in accordance with the label on the original container.

Illegal Containers. No pesticide shall be placed or stored in any type of container commonly used for food, drink, or any other household products. This precaution will prevent accidental pesticide poisonings or injuries, especially those involving children.

Delivery and Transportation of Pesticides

Delivery. Any person who delivers a container to a property that holds, or has held, a pesticide, must deliver such containers to a person in charge of the property or that person's agent, or a pest control business licensee, or the licensee's employee. If a responsible person is not at the property at the time of delivery, the containers can be left in a locked enclosure that is posted with appropriate warning signs.

Transportation. Pesticides must not be transported in the same compartment with persons, food, or feed. Pesticide containers must be secured to the vehicle during transportation in a manner that will prevent spillage into or off the vehicle. Pesticide containers made of paper, cardboard, or similar material must be covered when necessary to protect them from

moisture.

All pesticide containers must have labeling, either the original registered product labeling or service container labeling.

For other requirements regarding the transportation of pesticides, contact the California Highway Patrol or the Department of Transportation.

Container Rinsing and Disposal Requirements

Container Rinsing. Containers that have held less than 28 gallons of a liquid pesticide must be rinsed and drained by the user at the time of use by one of the following methods:

A. Method 1 - Triple Rinse and Drain

1. Use the following amount of water or other appropriate rinse solution for each rinse.

Size of Container	Amount of Rinse Medium
Less than 5 gallons	1/4 container volume
5 gallons or over	1/5 container volume

2. Place required minimum amount of rinse medium in the container, replace the closure securely, and agitate the container to get the rinse all over the interior surfaces of the container.

3. Drain the rinse solution from the container into the tank mix. Allow the container to drain 30 seconds after normal emptying.

4. Repeat the entire procedure at least two more times so as to provide a total of three rinses, or until the rinsate is clear. It is important that the rinse solution is drained into the mix tank and applied on the crop or site that is being treated.

B. Method 2 - Continuous or Jet-rinse

1. Invert the emptied container over a nozzle located in the opening of a spray tank or nurse rig, which is capable of rinsing all inner surfaces of the container.

2. Activate the rinse nozzles allowing the rinse solution to drain into the tank.

   The rinse must continue until the rinse solution appears clear and a minimum of one-half of the container volume of rinse solution has been used. A minimum of 15 pounds pressure per square inch is required for proper rinsing. High pressures should be avoided as a precaution against misting, splashing, or other undesirable effects potentially hazardous to persons at the rinse site.

C. Other rinse methods, equivalent in effectiveness to the methods above, may be used if approved by the Director.

In addition, closed systems must include provisions for adequate rinsing.

Pesticide and Container Disposal. Disposal sites that may accept pesticides and used pesticide containers must do so in accordance with requirements of the Department of Toxic Substances Control, State Water Resources Control Board, and the Regional Water Quality Control Board.

In some counties, a certificate or permit must be issued by the county agricultural commissioner before rinsed containers can be disposed. Before disposing of pesticides or used pesticide containers, consult with the local county agricultural commissioner who will be familiar with local requirements.

Regulations allow rinsed containers to be recycled and unrinsed, and used containers which have held 28 gallons or more to be reconditioned. In either case, the procedures must be approved by the Director.

Unrinsed, emptied pesticide containers may be returned to the registrant, with the registrant's prior approval, with all lids or closures securely tightened. Contact the California Highway Patrol or the Department of Transportation for specific transportation requirements.

Storage of old pesticide materials or unrinsed containers awaiting disposal may require a Hazardous Waste Facility Permit. (Unrinsed containers include containers from which contents cannot be adequately removed by rinsing or that contain a pesticide that is used without dilution.) Contact the Department of Toxic Substances Control for specific requirements.

Exemptions. The requirements for delivery, posting of the pesticide storage area, transportation, and the rinsing of pesticide containers, do not apply to containers that hold, or have held, pesticides that are packaged, labeled, and used for home use when in the possession of a householder on his/her property.

Containers which hold or have held pesticides registered for spray adjuvant uses only are exempt from the pesticide container rinse and disposal requirements.

The outer shipping containers that are not contaminated with a pesticide are exempt from the pesticide container rinse and disposal requirements.

Consult with the local county agricultural commissioner, if you have questions regarding these exemptions.

Review Questions

1. Who is responsible for the control of pesticides, pesticide containers, and pest control equipment?

2. What are the storage requirements for pesticides?

3. How must emptied and rinsed pesticide containers be stored prior to disposal?

4. When is it required to post warning signs around a pesticide storage area? How many signs are required to be posted?

5. Each sign used for posting pesticide storage areas must be of such size that it is readable at what distance?

6. What are the labeling requirements for service containers?

7. Why are pesticides kept in their original containers?

8. What are the requirements for any person making a pesticide delivery?

9. Are pesticides prohibited from being transported in the same compartment with persons, food, or feed?

10. When rinsing emptied pesticide containers, as required, what should be done with the rinse solution?

11. When using a continuous or jet-rinse procedure, why should excessive pressure be avoided?

Chapter VI. Pesticide Worker Safety

The purposes of worker safety regulations are to provide safe working conditions for field and other workers, to reduce risk of exposure, and to ensure the availability of medical services for employees who mix, load, apply (including flaggers), store, transport, or otherwise handle pesticides for any use. Employers have the responsibility to ensure that employees handle and use pesticides in accordance with the label and the requirements of the laws and regulations.

Hazard Communication Information for Employees

On January 1, 1992, the **Hazard Communication Regulations** became effective (See ***Appendix VII-1***). The purpose of these regulations is to ensure hazards are identified and that employees are informed about the hazards they face in the workplace and understand the procedures necessary to protect themselves. These regulations supplement the current Worker Safety Regulations by establishing additional procedures that the employer must follow in disseminating the hazard communication information to employees who may be exposed to the pesticides during the course of their work. See ***Appendix I-3***, Agricultural Civil Penalties: Type and Frequency of Sections Cited. **Worker safety violations ranked number one.**

These regulations do not cover employees involved in manufacturing, formulating, or repackaging pesticides; these employees are covered under the Department of Industrial Relations, Cal-OSHA.

Employee Training Requirements

The employer must have a written training program for employees who handle pesticides. The written program must describe the materials (i.e., study guides, pesticide labels, video tapes, etc.) and the information that will be provided and used to train the employees. The employer must maintain a copy of the written training program for two years at a central location at the workplace accessible to the employees. The written program must address each of the subjects specified; in addition, the employer must provide the training so that each employee who handles any pesticide understands the following for each pesticide that is used:

1. The immediate and long-term hazards involved, including the hazards associated with exposure to pesticides with known or suspected chronic effects (i.e., tumors, cancer and other effects due to repeated or continuous exposure, birth defects, or an effect on parental reproductive performance) as identified in Material Safety Data Sheets (MSDS), pesti-

cide labeling and/or Pesticide Safety Information Series (PSIS) leaflets. An example of a Material Safety Data Sheet is shown in ***Appendix VI-1***.

2. The safety procedures to be followed, engineering controls (such as enclosed cabs and closed systems) to be used, and the clothing and protective equipment to be used.

3. The procedures for handling nonroutine tasks or emergency situations, the ways poisoning or injury from pesticides can occur, the importance of immediate decontamination of skin and eyes when exposure occurs, the common symptoms of pesticide poisoning, and where to obtain emergency medical treatment.

4. The purposes and requirements of medical supervision if Toxicity Category I or II organophosphate or carbamate pesticides are handled for the production of an agricultural commodity.

5. Applicable laws, regulations, MSDS, PSIS leaflets and label requirements.

6. The employee's rights which include:

   A. To personally receive information regarding pesticides to which they may be exposed;

   B. For the employee's physician or employee representative* to receive information regarding pesticides to which the employee may be exposed;

   C. Against discharge or other discrimination due to their exercise of these rights; and

7. The location of the written Hazard Communication Program (PSIS Leaflet A-8); pesticide use records; PSIS leaflets; MSDS; employee exposure and monitoring records; and training record.

* An employee representative could be a representative of a California Rural Legal Assistance Foundation, a family member, or any person the employee has designated to act in his/her behalf.

Training must be completed **before** an employee is allowed to handle any pesticide and be continually updated to cover any new pesticides that will be handled. Training must be repeated at least annually thereafter.

Initial training may be waived if the employee is a certified commercial applicator, or submits a record indicating that training was received within the last year and a letter from the previous employer documenting satisfactory work practices.

The employer must record the date and extent of the initial and annual required training given to the employee and the job to be assigned. The training record must be verified by the trainer's, employee's, and employer's signatures and retained by the employer for two years

at a central location at the workplace accessible to employees. For a sample of the Employee Pesticide Safety Training Record form, see ***Appendix VI-2***.

Employee Medical Requirements

Emergency Medical Care. Employers must arrange for emergency medical care in advance, for employees who handle pesticides. Employees must be informed of the name and location of the facility where emergency medical care is available. In addition, the name, address, and telephone number of the medical facility (clinic or hospital emergency room) providing such care must be conspicuously posted at the work site, or in the work vehicle if there is no designated work site. If the identified facility is not reasonably accessible from the work location, the procedures to follow to obtain emergency medical care must likewise be posted.

When there are reasonable grounds to suspect that an employee has a pesticide illness because of the presence of symptoms such as headache, weakness, dizziness, blurred vision, nausea, abdominal cramps, sweating, or tightness of the chest, or when exposure to a pesticide has occurred that might reasonably be expected to lead to an illness, the employer must ensure that the employee is immediately taken to a physician.

Medical Supervision. Whenever an employee handles a pesticide in Toxicity Category I or II that contains an organophosphate or carbamate used for the purpose of producing an agricultural commodity, the employer must maintain use records that identify the employee, name of the pesticide, and the date of handling.

Each employer who has an employee who regularly handles a pesticide in Toxicity Category I or II used for the production of an agricultural commodity must have a signed written agreement with a doctor which includes names and addresses of both the doctor who will provide medical supervision, and the employer responsible for the employees. The doctor must be aware and possess a copy of the document, "Medical Supervision of Pesticide Workers - Guidelines for Physicians" which is available from the Department of Health Services. A copy of this agreement must be given to the county agricultural commissioner, by the employer, no later than when an employee begins to regularly handle these pesticides.

Cholinesterase Determinations. Employees who regularly handle Toxicity Category I or II pesticides that contain an organophosphate or carbamate are required to have baseline red cell and plasma cholinesterase determinations which must be verified every two years. Employers must ensure that new employees have red cell and plasma cholinesterase determinations within three working days after the conclusion of each 30-day period in which these pesticides are regularly handled. After three tests at 30-day intervals, further periodic monitoring must be specified in writing by the medical supervisor. If the medical supervisor has not made a written recommendation for continued periodic monitoring, the testing interval must be 60 days or every second period for regular handling. A record of the agreement to provide medical supervision, use records, all recommendations and all test results must be maintained by the employer for three years and be available for inspection by the employee, Director, county agricultural commissioner, county, or State health officials.

If an employee's red cell or plasma cholinesterase level falls below 80 percent of the baseline, contact the county agricultural commissioner for further instructions.

Working Alone

When an employee mixes, loads, or applies a pesticide in **Toxicity Category I** for the production of an agricultural commodity, the following apply:

1. **Daylight Operations** - Working alone is permitted only when personal, radio, or telephone contact is made to a responsible adult at least every two hours.

2. **Nighttime Operations** - Working alone is permitted only when personal, radio, or telephone contact is made to a responsible adult at least every hour.

3. A pilot, mixer, loader and/or flagger team is considered as working together. Also, when two ground applicators are working in the same field and they can see each other or each other's application vehicles, no additional person is necessary.

Change and Washing Facilities

Change Area. For any employee who regularly handles pesticides in **Toxicity Category I or II**, the employer must ensure there is, at the place where employees complete their work day, an area where they may change clothes and wash themselves at the end of the workday. Clean towels, soap, and adequate water must be available to allow for thorough washing. The employer must instruct the employee to thoroughly shower with warm water and soap as soon as possible after the end of each work shift (the employee can shower at home). The employer must provide a clean, pesticide-free place where employees may store any personal clothing not in use while at work handling pesticides.

Washing Facilities. Clean water, soap, and towels for routine washing of hands and face and for emergency washing of the entire body must be readily available for all employees at the work site where they mix or load any pesticides in **Toxicity Category I or II**. A minimum of ten gallons of water must be present at the beginning of each workday for one employee, or a minimum of 20 gallons for two or more employees. This water must be stored separately from water used for mixing with pesticides, except when the tank holding the water for mixing with pesticides is equipped with appropriate valves to prevent back flow of pesticides into the water. Any other easily available supply of clean water within 100 feet of the mixing and loading site is satisfactory to meet this requirement.

Work Clothing

At the start of each workday, an employer must provide and ensure that each employee who handles any pesticide in **Toxicity Category I or II** wears clean work clothing. The work clothing can be either coveralls or long-sleeved shirt and long-legged trousers, all of tightly woven fabric. In addition, at least one extra change of clean work clothing must be provided

and made available at the mixing and loading site when pesticides in **Toxicity Category I or II** are used.

Employees are required to remove their work clothing and wash at the end of each workday. Potentially contaminated work clothing must not be taken home by the employee. However, if the employee does not return to the employer's headquarters at the end of the workday, the employee can remove and store work clothing in a sealable container outside their own living quarters for later return to the employer. The employer must provide for the cleaning of the work clothing and must inform the person or firm doing the laundry that they will receive pesticide-contaminated clothing which should be laundered separately.

Safety Equipment

The employer must provide **all** necessary safety equipment and provide for its cleaning, repair, and replacement when necessary. The employer must require that all personal protective equipment be maintained and kept in a clean, specially designated place or locker when not in use. The pesticide labeling requirements must be followed if they are more restrictive than the requirements that follow.

Eye Protection. The employer must provide an employee with eye protection and require its use when the employee is:

1. Mixing and loading pesticides. Except when using a closed system, eye protection must be available at the work site and is required to be worn only when actually making or breaking connections, inserting or removing probes, and any other time when the integrity of the system is broken.

2. Adjusting, cleaning or repairing, mixing, loading, or application equipment that contains pesticides in hoppers, tanks, or lines.

3. Engaged in ground application activities using hand-held, vehicle-mounted, or towed equipment, except when: injecting or incorporating pesticides into soil using vehicle-mounted or towed equipment; vehicle-mounted spray nozzles are located below the employee and the nozzles are directed downward; working in an enclosed cab; or applying vertebrate pest control baits that are placed without being propelled from application equipment, baiting insect monitoring traps, or applying noninsecticide lures.

4. Flagging, except when the flagger is in an enclosed vehicle.

When eye protection is required, but pesticide labeling does not specify any particular kind, it must consist of safety glasses that provide front, brow, and temple protection, goggles, or a faceshield. If respiratory protection is also required, a full-face respirator may be used to meet both requirements.

Protective Gloves. Employers are required to provide gloves and require their use for all employees who handle any pesticide, including hand-held application equipment. The two

exceptions to this requirement are when the pesticide label specifies that gloves must not be worn, or when applying vertebrate pest control baits using long-handled implements that avoid actual hand contact with the bait or contaminated areas on equipment.

If a specific type of glove is not specified on the pesticide label, gloves made of rubber, neoprene, or other chemical-resistant material that provides equivalent or better protection from the pesticide being handled must be used.

Whenever gloves are required, the employee must be provided each workday with unused gloves, or previously used clean gloves which are in good condition and have no rips or cracks and have been thoroughly washed inside and outside with soap and water.

Chemical Resistant Protective Clothing. When the labeling or regulations specify waterproof or impervious pants and coat, or a rainsuit, the employer must provide and require employees to wear full-body, chemical-resistant protective clothing that covers the torso, head, arms, hands, legs, and feet. If an employee is working as an applicator in an enclosed cab or working as a flagger in an enclosed vehicle, then the full-body, chemical-resistant protective clothing must be available at the work site.

When an employee is mixing, loading, or transferring pesticides through a closed system, or in sealed water-soluble packets, the employee must wear a chemical-resistant apron, chemical-resistant gloves, and chemical-resistant boots; however, the full-body chemical-resistant protective clothing must be available at the work site.

If the ambient temperature exceeds 80°F during daylight hours or 85°F during nighttime hours (sunset to sunrise), pesticides requiring full-body, chemical-resistant protective clothing must not be handled by employees except when the employee uses a closed system, water- soluble packets, or is working as an applicator in an enclosed cab, a flagger in an enclosed vehicle, or uses a cooled, chemical-resistant suit or other control methods to maintain an effective working environment at or below the above respective daylight and nighttime temperatures (sunset to sunrise).

Respiratory Protection. The employer must provide and ensure that employees wear approved respiratory protective equipment when pesticide labeling or regulations require such equipment, or when respiratory equipment is needed to maintain employee exposure below an applicable recognized exposure standard. Respiratory protection required by these regulations or by labeling must be currently approved by the National Institute for Occupational Safety and Health (NIOSH) and/or Mine Safety and Health Administration (MSHA) for the specific chemical and exposure condition. The employer must have a written program that outlines the procedures for selecting, fitting, cleaning and sanitizing, inspecting and maintaining respiratory equipment. The employer is responsible for repair or replacement equipment as necessary due to wear and deterioration. The employee must be trained initially, and at least every year, on the need, proper use, sanitary care, and limitations of the respiratory equipment they are required to use. Respirators must be inspected before each use to ensure that all components are present and operate properly. Respirator air-purifying element (cartridges) must be changed according to pesticide product labeling directions or

the respirator manufacturer's recommendation, whichever is more frequent. In the absence of any instructions on the service life, the air-purifying elements must be changed at the end of each day's work period or changed sooner if the respirator user senses an odor, chemical taste, or irritation. The employer must record the date and extent of initial and annual required training and maintain the record for two years.

Employees with facial hair that prevents an adequate seal (e.g., beards) cannot work where respiratory protection is required unless they are provided the respiratory protection that does not require a face-to-facepiece seal for proper operation.

The employer must inform the employee that certain medical conditions may interfere with wearing a respirator while engaged in hazardous exposure situations. A statement in substantially the following form must be kept on file by the employer, and be signed and dated by each employee assigned to work that requires wearing a respirator:

> To the best of may knowledge, I have__, have no__ medical conditions which would interfere with wearing a respirator while engaged in hazardous exposure situations. I understand that heart disease, high blood pressure, lung disease or presence of a perforated ear drum require specific medical evaluation by a physician before safe use of a respirator can be determined.

If the employee checks that he/she has such a medical condition, then a doctor's report of evaluation and approval for respirator use must be obtained and placed on file before work requiring respirator use is allowed. The statement(s) must be kept on file for the duration of the employee's employment.

Equipment Requirements

Lighting. Whenever natural light in a mixing and loading area is not adequate to allow an employee to read the label and work in a safe manner, artificial light must be provided in such areas which is sufficient to perform these activities.

Safe Equipment. Equipment used for mixing, loading, or applying pesticides must be kept in good repair and be safe to operate. The county agricultural commissioner or Director may inspect equipment used to mix, load, or apply pesticides at any reasonable time. Equipment with any safety defect must be repaired to remove the hazard before further use.

All openings on tanks used for mixing or applying pesticides must be equipped with covers that prevent splashes and spills.

Any flexible hose under pressure and carrying a liquid pesticide in **Toxicity Category I or II**, must not pass unshielded through the cockpit of an airplane or helicopter.

Shut-off devices must be installed on the exit end of all hoses attached to mixing tanks carrying liquid pesticides in **Toxicity Category I or II**, and must be designed to prevent splashing onto the employee doing the loading, when filling operations are stopped and the

filler hose is removed from the inlet to the tank of the application vehicle. As an alternative, a reversing action pump or a similar system may be used that will empty the hose and will eliminate dripping of liquid from the end of the hose when the filling operation has stopped.

Each aerial or ground application tank with a capacity of 49 gallons or more used to mix or apply pesticides in **Toxicity Category I or II**, must have either:

1. A properly functioning sight gauge to indicate the internal liquid level in the tank to help prevent over-filling; or

2. The tank or filler hose nozzle must have a device that will automatically stop the filling operation, thus preventing the pesticide liquid mixture from spilling over.

Equipment Maintenance. Persons who own or operate pesticide mixing, loading, or application equipment must inform each employee who may be involved in the cleaning, servicing, and repair of such equipment of the hazards of the pesticides that persons may encounter and the methods of protecting themselves against injury or exposure. If cleaning, servicing or repairing is done by someone other than employees, then the person in charge of performing these services must be notified. Employees who clean, service or repair such equipment must be provided with any necessary protective equipment and/or clothing and be instructed and supervised in the maintenance operation in a manner that will reduce hazards or exposure.

Closed Systems

The most hazardous activity of handling pesticides involves hand-pouring of highly toxic pesticides. This activity has resulted in many serious illnesses. Therefore, employers must provide closed systems for employees who mix or load liquid pesticides in Toxicity Category I, or load diluted liquid mixes derived from dry pesticides in Toxicity Category I for the production of an agricultural commodity, or for all mixing and transfers of cotton harvest aids. Proper use of a closed system reduces the potential for exposure; therefore, it is important the closed system be properly operated, cleaned, and maintained.

Closed systems are not required for employees who handle a total of one gallon or less of pesticides in Toxicity Category I per day exclusively in the original containers of one gallon or less.

A closed system must be adequately designed to prevent exposure of any person. The system's design and construction must meet the Director's closed system criteria. Refer to ***Appendix III-6***, "Closed Systems - PSIS Leaflet A-3," for further information on California's closed system criteria. Questions concerning the closed system requirements should be addressed to the Department's Pesticide Enforcement Branch.

Pesticide Safety Studies

No person is permitted to conduct any study in which human subjects are to be experimentally exposed to pesticides, unless the Director has approved the study. Each applicant must give

the Director assurance that:

- The health of the participants is not likely to be endangered.
- The participants will be informed of the potential risks.
- All persons who might be exposed will be under medical supervision.

The county agricultural commissioner or Director may order any employee exposure in these studies to cease immediately, and the Director may cancel approval whenever it is deemed advisable in the interest of the employee or public safety.

Review Questions

1. What pesticides are required to have a closed system for employees?

   (a) All formulations of Toxicity Category I pesticides.
   (b) Cotton Harvest Aids.
   (c) All Toxicity Category I, II and III pesticides.
   (d) Both a and b.

2. What subjects must an employer address in the worker safety training provided to an employee?

3. How frequently must training be provided to an employee who handles any pesticide?

   (a) Prior to handling any Toxicity Category I pesticide and within 30 days of handling a Toxicity Category II or III pesticide.
   (b) At least once a year after the initial training.
   (c) Training must be provided at least once prior to handling any pesticide.
   (d) Every year for restricted materials, and every other year for all other pesticides.

4. Where must emergency medical care information be posted?

5. What are some of the symptoms of pesticide poisoning?

6. When must an employer maintain use records that identify the employee, the name of the pesticide used, and the date of exposure?

7. When is the employer required to provide medical supervision?

8. When working alone with a pesticide in Toxicity Category I, how does daylight supervision differ from nighttime supervision?

9. When is an employer required to provide a change area and washing facilities for employees?

10. How many gallons of water must an employer provide when there are three employees involved in mixing or loading pesticides in Toxicity Cagetory I or II?

11. What must employers do concerning protective clothing and safety equipment for their employees?

12. When is an employee required to wear eye protection?

13. What are the different types of eye protection?

14. When are protective gloves required to be worn by employees?

Chapter VII. Field Worker Safety

The primary purpose of these regulations is to prevent field workers from being exposed to the residues of pesticides in treated fields. This requires that certain precautionary or safety measures be taken before field workers enter the treated field, which includes the field worker having prior knowledge of pesticide poisoning symptoms and proper procedures for immediate medical attention if he/she becomes ill or exposed. The employer is responsible for the safety of employees; therefore, the requirements stated in this chapter are intended as a preventive means of avoiding employees' exposure to pesticides or residues of pesticides. ***Appendix VII-1*** provides information on Hazard Communication.

Training Verification Program

There is a provision in the Worker Protection Standard (WPS) for a training verification program. This training verification program establishes a mechanism for issuing training verification cards to document that field workers received pesticide safety training that meets the WPS. It minimizes the need for new and future employers to retrain employees and maximizes the effective use of training resources. Participation in the verification program is voluntary. The Department of Pesticide Regulation (DPR) is implementing this voluntary training program for field workers. However, DPR does not have any plans for implementing this program for pesticide handlers in California.

Qualified trainers participating in the training verification program will be required to submit an application to DPR and enter into a contract that outlines inventory control and record requirements. A supply of serially numbered cards will then be provided to the trainer. Cards are then provided to field workers who have received the training. These cards become the employee's property and may be used by them to verify to regulators and future employers that they have previously been trained. Trainers are not authorized to print their own version of the cards.

Employers and other trainers of fieldworkers who choose not to participate in the voluntary program must still meet the WPS requirements for training. In this instance, to facilitate compliance with the WPS, employers and trainers of field workers may elect to retain for five years, a copy of a class roster, signed by the trainer and each trainee, indicating the date and the address of the location where the training took place.

Hazard Communication for Field Workers

Before employees may enter a treated field, the employer, including a labor contractor, must

make accessible to employees at the worksite, a copy of the Pesticide Safety Information Series (PSIS) Leaflet A-9 - Hazard Communication Information for Employees Working in Fields (see ***Appendix III-6***) which is available from the county agricultural commissioner in both English and Spanish. An example of making this information accessible to employees could be to place it in a binder and keep it in the field supervisor's vehicle, or provide it as a handout at the worksite. If an employee is unable to read, upon the employee's request, the employer must read (or provide someone to read) the leaflet to the employee in a language understandable to that employee. See ***Appendix VII-1***, Hazard Communication for Field Workers, for additional information.

The operator of the property must maintain the following records and documents in a central location at the workplace, and accessible to employees, including the employees of a labor contractor, who enter a treated field.

- Pesticide use records, which include the information identified in Chapter IV of this study guide, for the pesticides that have been applied to the field within the last two years.

- Copies of the PSIS leaflets which are specific to the pesticides listed in the pesticide use records or general information about pesticides.

- A Material Safety Data Sheet (MSDS) for each pesticide listed in the pesticide use records. The MSDS is developed by the registrant and may not exist (or be available) for every pesticide. If an MSDS is not provided by the registrant but an employee, employee representative, or employee's physician makes a request for the MSDS, the operator of the property must, within seven working days of the request, make a written inquiry to the registrant of the pesticide requesting the MSDS be sent to him/her. When contacting the registrant for the MSDS, certain procedures must be followed; contact the county agricultural commissioner or DPR for further instructions on the procedures to follow.

- The operator of the property must inform his/her employees, before they are allowed to enter the pesticide treated field, of the location and availability of the pesticide use records, PSIS leaflets, and the MSDS. The PSIS leaflet provides additional information about the use of closely related pesticides, a specific pesticide, or general information about the use of pesticides (e.g., first aid, respiratory protection, storage and disposal). The PSIS leaflets are written and developed by DPR. If the employees are employed by a labor contractor, the operator of the property must inform the labor contractor of the location of these records and other documents; the labor contractor must then inform his/her employees. If the location of records, documents, and information changes, the operator of the property must inform his/her employees or the labor contractor immediately of the new location.

- The employer is required to inform their employees that they (the employees, their doctors, and their representatives) have the right to access the information regarding the pesticides to which they may be exposed. Also, employers must inform their employees that the employees are protected against discharge or other discrimination due to the exercise of their rights.

- Upon request, the operator of the property must make the above-specified records or documents available to the employee, employee representative, labor contractor, or the employee's physician within 48 hours.

- The employer must have available, at each worksite that is a treated field, a Crop Sheet appropriate to the crop at that worksite.

Crop Sheets

The employer must have available at each worksite that is a treated field, the appropriate Crop Sheet (see ***Appendix VII-2*** for sample crop sheets). The Crop Sheet must be accessible to all employees (including tractor drivers and irrigators) for the duration of their activities in that crop. Upon request, the employer must read the Crop Sheet to a requesting employee in a language understandable to that employee.

The Crop Sheets are available in English and Spanish from the county agricultural commissioner. The Crop Sheets contain the following:

- A list of pesticides commonly applied to the crop.

- The month or season of the year each pesticide is typically applied to the crop.

- Information concerning possible human health hazards from pesticides.

- Information concerning protective work procedures and clothing required by regulations or labeling.

- A list of symptoms of poisoning from pesticides.

- Information concerning treatment for pesticide poisoning or injury.

Employer Responsibilities

Field Work During Pesticide Application. No person shall apply any pesticide in such a manner that they contaminate the body or clothing of any person not involved in the application process. Employees involved in the application process must wear appropriate protective clothing and/or equipment.

Training. Field worker supervisors must be knowledgeable in what posting means, the activities prohibited during a reentry interval, where to go for emergency medical care, and the usual symptoms of organophosphate and carbamate poisoning. The field worker supervisor is the person directly responsible for the crew's activities. This person can be a farm labor contractor. See ***Appendix VII-1***, Employee Training for additional information.

Emergency Medical Care. When employees are required to enter pesticide-treated fields, emergency medical care must be planned for in advance. The employer must locate a medical facility where emergency medical care is available for all employees who will be working in treated fields. Also, employees or their supervisors in the field must be informed of the name and location of a doctor or medical facility where emergency medical care is available, and if the identified facility is not accessible from the work location, the procedures they must follow to obtain emergency medical care.

The employer must ensure that an employee is immediately taken to a doctor when there is reason to believe that an employee has a pesticide illness, or when an exposure to a pesticide has occurred that might lead to an employee's illness.

Handwashing Facilities. Handwashing facilities must be available for field workers including those who are performing cultural practices. Handwashing facilities must be in the immediate vicinity and designed so field workers can wash their hands in clean water using soap or other suitable cleansing agents and dispose of used wash water without nuisance or contamination to the food crop.

Field Reentry After Pesticide Application

A reentry interval is the period of time after a crop or commodity is treated with a pesticide and restrictions on entry are in effect in order to protect employees from potential exposure to a hazardous level of pesticide residue.

No employee is permitted to enter any field treated with a pesticide until the pesticide spray has dried or the pesticide dust has settled, except in the case of life or health-threatening emergency. The waiting period for the drying or settling to occur need not exceed 24 hours.

When reference is made to pounds of pesticide in a restricted entry interval, this means pounds of active ingredient. A day is considered to be a 24-hour period beginning at the conclusion of the application to the identified field group or portion of a field.

Reentry Restrictions. A treated field may be entered by any employee without restriction after the pesticide spray has dried or dust has settled, except when the labeling of the pesticide specifies a longer reentry interval, or when a longer reentry interval is specified in regulation (see ***Table 7-1, page VII-9***) after considering any reentry interval adjustments. In case of a conflict between the pesticide labeling and that specified in regulation, the longer reentry interval must be followed. When more than one reentry interval is applicable in a given situation, the longer interval must be used.

Employees are not permitted to enter any part of a field treated with a pesticide included in ***Table 7-1(a)*** (or specified in regulation) to conduct activities such as production or harvesting operations, weeding, non-harvest cultural practices, irrigating, or any other activity that may involve similar body contact with the treated plants, unless the reentry interval has expired.

Employees may enter fields treated with other pesticides after the spray has dried or the dust has settled, during a reentry interval as shown in ***Table 7-1(b)*** (or as specified in regulation), or pesticide labeling if the employer ensures the employees are informed and protected as follows:

1. Informed of the identity of the pesticides applied, the existence of the reentry interval, and the protective work procedures they are required to follow.

2. Wearing the specific protective clothing required by regulation or pesticide labeling for early entry. In the absence of specific protective clothing requirements, employees must wear work clothing, gloves that are cleaned daily and are made of either cloth, rubber or plastic, and socks and shoes.

3. The employer must also instruct the employees to thoroughly shower with warm water and soap as soon as possible after the end of the work shift.

The following activities are **prohibited** in any field treated with a pesticide included in ***Table 7-1(a)*** (or as specified in regulation) while a reentry interval is in effect:

- Picking or otherwise hand harvesting.

- Thinning or weeding, except when all plants in the treated field are seedlings, i.e., they have no more than six true leaves; the work is done with tools that avoid hand contact with treated plants; and the employee is informed and protected as stated in numbers 1 through 3 above.

- Tying, pruning, tree-limb propping, disbudding or conducting other nonharvest cultural practices that may involve worker contact with plants.

- Irrigating, except when the employee is informed and protected as previously stated in numbers 1 through 3 above.

- Operating a tractor or other machinery, except when operating in an enclosed cab; metal or plastic shields; or operator placement or other control methods used to physically prevent the employee from coming into contact with treated plants and the employee is informed and protected as previously stated in numbers 1 through 3 above.

Soil Incorporated Reentry Restrictions. Employees not engaged in the pesticide application must not be permitted to enter a field treated with a soil-incorporated pesticide in Toxicity Category I, until the pesticide has been thoroughly incorporated into the soil. If incorporation is done as a separate operation by irrigation or mechanical methods, the employees are considered to be applicators and are required to wear the same protective equipment as an applicator in a similar exposure situation.

Irrigation Process Reentry Restrictions. Employees not involved in pesticide applications must not be permitted to enter fields treated using an irrigation process (other than one using

drip or localized emitters) with a pesticide in Toxicity Category I, until the soil incorporation is complete and 24 hours have elapsed since the completion of irrigation. Irrigation employees conducting applications are required to wear chemical-resistant boots; chemical-resistant gloves whenever work may result in hand contact with treated soil, water or other materials in the field; and other chemical-resistant clothing whenever work may result in body contact with treated soil, water, or other materials in the field.

When a pesticide in Toxicity Category I or a minimal exposure pesticide, i.e., Bromoxynil (Buctril, Bronate), Folpet, Oxydemeton-methyl (Metasystox-R), Propargite (Omite, Omite CR, Comite) is being applied through an irrigation system, before the application starts, signs must be posted in English and Spanish stating, "DANGER, Pesticides are being applied in water through the irrigation system. Do not drink the water from the irrigation system." These signs must be readable at 25 feet and must be posted at all the usual points of field entry, and must be placed at intervals not exceeding 600 feet around the field. Signs must be removed no later than five days after an application, unless treatment occurs weekly or at more frequent intervals.

Reentry Interval Adjustments. Whenever a mixture of two or more organophosphate pesticides having a reentry interval is applied in combination, the reentry interval is determined by adding to the longest applicable reentry interval, 50 percent of the next longest applicable reentry interval. For example, when treating citrus with a combination of Guthion and Phosphamidon, the reentry interval would be 37 days:

Restricted Entry Interval	Calculations
Guthion - 30 days	50 percent of 14 (days) or 14 x 0.5 = 7
Phosphamidon - 14 days	30 + 7 = 37 days

Restricted entry intervals may change from time to time; consult with the county agricultural commissioner for current information.

When there is no foliage on the plant that has been treated by a pesticide and any crop cover or weed cover in the treated area is not over four inches in height, the reentry interval can be reduced by 50 percent, but in no case to less than 24 hours. The reentry interval for methidathion (Supracide®) on almonds, apples, apricots, cherries, nectarines, peaches, pears, plums, prunes, and walnuts must be reduced by 50 percent.

With prior authorization from the county agricultural commissioner, a reentry interval can be shortened by one of the following four procedures:

1. Two inches of rainfall occurring within any seven-day period following the pesticide application.

2. The equivalent of two inches of rainfall applied evenly above all plants by sprinkler irrigation equipment within any seven day period following the pesticide application.

3. For tree crops, at least 50 gallons of water applied at one time under pressure and evenly distributed to each tree.

4. The plants are tested by a procedure acceptable to the Director and found to have no residue or residue levels that the Director considers not to be hazardous.

Warning and Posting Requirements

Oral Warnings. Any employee who may enter an area being treated or which has been treated with a pesticide for which the reentry interval has not expired must be orally warned by the employer.

When the reentry interval is two days or more and posting is required, the following sign may be used in lieu of the sign required when the reentry interval is more than seven days:

DANGER **PELIGRO**

Name of Pesticide Pesticida (Veneno)

DO NOT ENTER **NO ENTRE**

When the reentry interval is more than seven days, the following sign must be used:

DANGER **PELIGRO**

Name of Pesticide Pesticida (Veneno)

DO NOT ENTER UNTIL Date **NO ENTRE HASTA**

Grower's Name Field Identification, if any

The warning must specifically state the date of the application, identify the pesticide by brand name or common chemical name, and precautions including reentry restrictions to be followed as stated on the registered label or in regulation. The warning must be given in a language understood by the employee.

The warning must include information on any applicable reentry requirements, as previously addressed in "Field Reentry After Pesticide Application," ***page VII-3***.

Warning Signs. Posting of warning signs is required in the following situations:

1. When any pesticide in Toxicity Category I with a reentry interval of two or more days is applied to the foliage of the following crops: broccoli, cauliflower, celery, flowers, lettuce, ornamentals, strawberries, and tomatoes (fresh market).

2. When any pesticide in Toxicity Category I with a reentry interval of two days or more is applied during the period of April 15 through harvest to the following crops: grapes, nectarines, peaches, plums, and prunes.

3. When any pesticide is applied and the application results in a reentry interval greater than seven days.

Whenever warning signs are required, the operator of the property or the agent with written authorization must post warning signs at the usual point(s) of entry. When treated fields requiring posting are next to a public right-of-way and are unfenced, warning signs must be posted at each corner and at intervals not exceeding 600 feet, in addition to the normal points of entry.

Warning signs must be of such durability and construction that they will remain clearly legible for the duration of the restricted entry interval. The warning sign must be of such a size that the word "DANGER" is readable and two skull and crossbones symbols are clearly visible at a distance of 25 feet and written in both English and Spanish. The use of a third language is permissible.

Warning signs must be posted before the application begins. The signs must not be posted unless a pesticide application is scheduled within the next 24 hours. The signs must not be removed during the reentry interval. The signs must be removed by the operator of the property (or the agent with written authorization) within five days after the end of the reentry interval and before employees are allowed to enter the treated field to perform activities that are prohibited during a reentry interval (see ***pages VII-4 and VII-5***). See ***Appendix VII-1***, Notice.

NOTE: The inclusion of a reentry interval in ***Table 7-1*** does not imply that the use is currently registered.

Table 7-1. Reentry intervals in days.

(a) *Pesticide* *Crop:*	Apples	Citrus	Corn	Grapes	Peaches & Nectarines	Other Crops
Anilazine (Dyrene)						2
Azinphos-methyl (Guthion)	14(k)	30		21	14(k)	(1)
Chlorpyrifos (Lorsban, Dursban)		2				
Diazinon		5		5	5	
Dicrotophos (Bidrin)						2
Dimecron (Phosphamidon)	2	14				2
Dimethoate (Cygon)		2		2		
Dioxathion (Delnav)		30		30	30	
Disulfoton (Di-Syston)			2			2
Endosulfan (Thiodan)	2	2	2	2	2	2
EPN	14	14	14	14	14	(h)
Ethion	2	30	2	14	14	2
Malathion		1		1	1	
Methamidophos (Monitor)						2
Methidathion (Supracide)	2(n)	30(m)			2(n)	2
Methomyl (Lannate, Nudrin)	2	2	2	7(j)	2	
Mevinphos (Phosdrin)	2	4	2	4	4	2
Monocrotophos (Azodrin)		7				2
Naled (Dibrom)		1		1	1	
Oxamyl (Vydate)	2	2			2	
Oxydemeton-methyl (Metasystox-R)	2	2	2	2	2	2
Parathion-ethyl			14(e)			14(e)
Parathion-methyl	14	14(g)	14(g)	14(f)	21	14(g)
Parathion-methyl (encapsulated)	2	2	2	2	2	2
Phorate (Thimet)			7			
Phosalone (Zolone)						1
Phosmet (Imidan)				5	5	
Propargite (Omite, Comite)	21	42	7	30	21	21(q)(r)
Propargite (Omite-CR)		42				
Sulfur		1		1(i)	1	
All Category I Pesticides (p)	1	1	1	1	1	1

(b) *Pesticide* *Crop:*	Flowers	Other Crops
Dodemorph Acetate (Milban)	1	
Fenbutatin-oxide (Vendex)	1	
Folpet	30	30
Methyl Thiophanate/ Etridiazole (Banrot)	1	
Mexacarbate (Zectran)	1	
Triforine (Funginex)	1	

Footnotes:

(a) For all applications with spray mixtures containing two pounds or less of parathion ethyl per 100 gallons, with rates of eight pounds or less per acre, and a total of no more than ten pounds per acre in the previous 12 months.

(b) For all applications with spray mixtures containing two pounds or less of parathion-ethyl per 100 gallons, with rates of more than eight pounds per acre, or more than ten pounds per acre in the previous 12 months.

(c) For all applications with spray mixtures containing more than two pounds of parathion-ethyl per 100 gallons.

(d) Any reentry interval for parathion-ethyl still in effect on May 15 in the counties of Fresno, Kern, Madera, and Tulare is extended 90 days from the application date. All applications made after May 15 shall have a 90-day reentry interval except for any reentry interval still in effect on September 15 which is reduced to 30, 45, or 60 days, respectively, from the date of application, in accordance with footnotes (a), (b), and (c).

(e) For applications of 0.5 - 1.0 pound per acre of parathion-ethyl, there is a seven-day reentry interval. For applications of less than 0.5 pound per acre, the reentry interval is two days.

(f) The reentry interval for nonencapsulated parathion-methyl on grapes in Monterey County is six days.

(g) When one pound or less per acre of parathion-methyl is applied, there is a two-day reentry interval.

(h) When more than one pound per acre of EPN is applied, there is a 14-day reentry interval.

(i) For applications of sulfur in Riverside County during March and April, and in San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and Kern Counties from May 15 through harvest, there is a three-day reentry interval.

(j) All applications made after August 15 of each season must have a 21-day reentry interval. This interval may be terminated after ten days if leaf samples are tested to show 0.1 micrograms per square centimeter or less of dislodgeable foliar residue of methomyl. The test procedure must be acceptable to the Director and determined to have no residues, or residue levels that the Director considers not to be hazardous.

(k) When a total of 1.0 pound or less of azinphos-methyl has been applied per acre to apples, peaches, or nectarines in the current calendar year, thinning may be done after seven days.

(l) For applications of azinphos-methyl on stone fruit (excluding almonds), there is a 14-day reentry interval. When a total of 1.0 pound or less of azinphos-methyl has been applied per acre in the current calendar year, thinning may be done after seven days.

(m) Concentrate spray of methidathion, as authorized by a Special Local Need Registration, has a 40-day reentry interval.

(n) This reentry interval is established to provide protection from dormant use of methidathion only.

(o) (Reserved)

(p) In addition to other reentry intervals included in this Table, all pesticides (including those listed in this Table) in Toxicity Category I, have a minimum of one-day reentry interval on all crops (including those listed in this Table).

(q) The reentry interval for strawberries and field-grown roses treated with propargite is three days.

(r) The reentry interval for cotton treated with propargite is seven days. After the termination of the reentry interval (seven days) and until the start of harvest, employees may enter cotton fields treated with propargite provided work clothing, gloves that are clean daily and are made of either cloth, rubber or plastic, and socks and shoes are worn.

9. Which pesticides have at least a 24-hour reentry interval?

10. When are warning signs required to be posted?

11. Who is responsible for the posting of warning signs around the pesticide-treated fields?

12. What are the requirements pertaining to the removal of posted warning signs from treated fields upon expiration of a reentry interval?

13. How would you determine a reentry interval adjustment?

14. When are oral warnings required to be given to an employee? What information must the warning include?

is used for fumigation inside enclosed spaces, at least two trained employees must be present at all times during introduction of the fumigant, and entry into the enclosed space for purposes of facilitating aeration or determining the concentration of the fumigants.

In addition, the employer must ensure the hazard communication and worker safety requirements outlined in Chapter VI of this study guide are met.

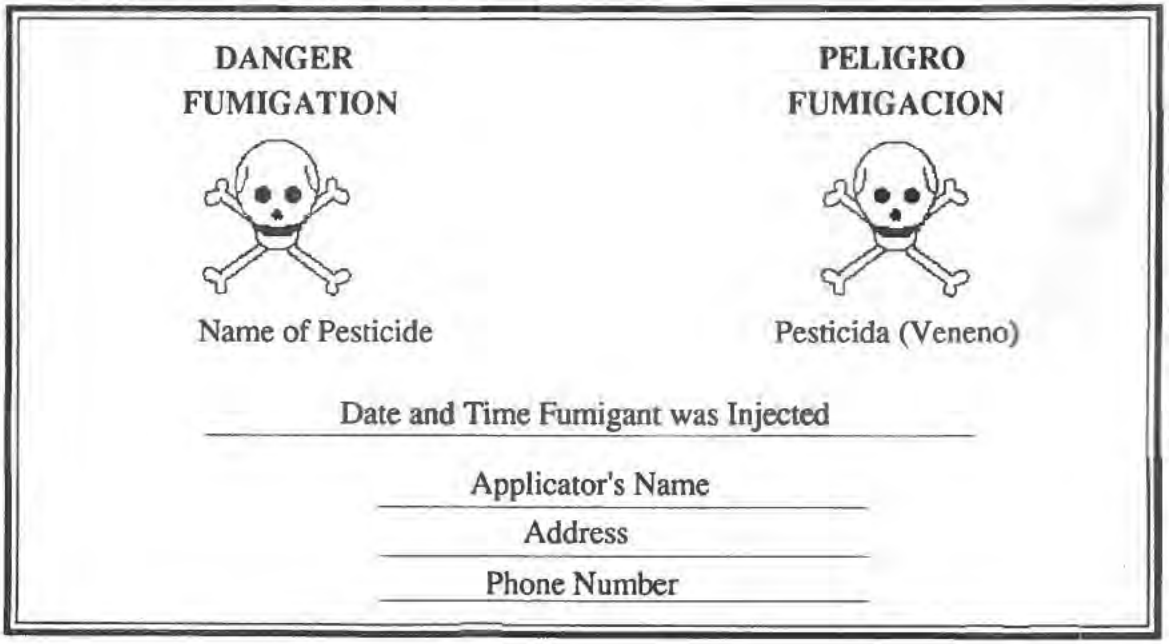
Warning signs. Before the fumigation starts, warning signs must be posted and plainly visible at all entrances to the space under fumigation. Warning signs must **not** be removed until fumigation and ventilation have been completed, and the premises are safe for reentering.

Warning signs (see Figure 8-1) must be printed in red on white background and must contain, in English and Spanish, the following statement in letters not less than two inches in height: "DANGER - FUMIGATION." The signs must also have a skull and crossbones not less than one inch in height, and must state in letters, not less than one-half inch in height, the name of the fumigant, the date and time the fumigant was injected, and the name, address and telephone number of the applicator performing the fumigation.

Employees must not be allowed to enter fumigated enclosed areas, except to determine the fumigant concentration or facilitate aeration unless fumigant concentration in the area is known to be at or below the PEL, or, if there are more stringent requirements stated on the product labeling, then those requirements must be followed.

The fumigant must not be released into an occupied work area. After the completion of the fumigation, the treated area or products must be managed so that employees entering the area or working with the treated products are not exposed to a concentration in excess of the PEL,

Figure 8-1. Fumigation Warning Sign



or if there are more stringent requirements stated on the product labeling then those requirements must be followed.

Field Fumigation

Whenever methyl bromide or chloropicrin is used for field fumigation, at least two trained employees must be present during the introduction of the fumigant and removal of the tarps, if used.

Warning signs. The operator of the property, or agent with written authorization from the operator of the property, must post warning signs (see Figure 8-2) before the application begins. The signs must be posted no sooner than 24 hours before the application is scheduled to begin. The signs must be posted at the usual point or points of entry. When the fields are adjacent to a public right-of-way and are unfenced, warning signs must be posted at each corner and at intervals not to exceed 600 feet (this is in addition to the usual points of entry).

Warning signs must be of such durability and construction that they will remain clearly legible for the duration of the reentry interval, and be of such size so that the word "DANGER" is readable and two skull and crossbone symbols are clearly visible at a distance of 25 feet and will read in English and Spanish languages substantially as follows:

Figure 8-2. Field Fumigation Warning Sign.

DANGER **PELIGRO**

(Name of Pesticide) Pesticida (Veneno)

DO NOT ENTER UNTIL Date **NO ENTRE HASTA**

Grower's Name Field Identification, if any

The use of an additional third language on the sign is permissible. The warning signs must not be removed during the reentry interval. Signs must remain in place until aeration is complete.

Warning signs must be removed by the operator of the property, or the agent with written authorization from the operator of the property, within five days after the end of the reentry interval and before employees are allowed to enter the treated field.

Chapter IX. Pesticide Residue

California spends more than $40-million a year for the nation's most comprehensive pesticide regulatory program. The Department of Pesticide Regulation's Residue Monitoring Program is a key element in the integrated regulatory program designed to ensure the safe use of pesticides in California. This chapter will give you an overview of the laws and regulations concerning pesticide residues. A flow chart describing Pesticide Application: Post Harvest Commodity Treatment is shown in ***Appendix IX-1***.

Monitoring Produce for Pesticide Residues

Pesticide Residue. Pesticide residue is the remnant of a pesticide or degradation product(s) that can be found on or in a crop or commodity after application, or from other exposure to the chemical. Residues may result from direct application, drift, uptake from contaminated soil, or from other environmental sources.

Monitoring for Residues. California's Department of Pesticide Regulation and the U.S. Food and Drug Administration (U.S. FDA) collect and analyze samples of produce for pesticide residues. In addition, DPR, in conjunction with the county agricultural commissioners, collect samples for pesticide residue analyses of various produce commodities grown within the State.

The Department collects samples of produce for pesticide residue analyses throughout the year from chain store distribution centers, wholesale markets, points-of-entry, etc. These samples include domestic and foreign produce. The county agricultural commissioner may collect produce samples from the fields at any time during the growing season. All produce samples are collected and analyzed in order to monitor for illegal pesticide use and/or pesticide residues.

U.S. FDA samples domestic and imported produce in interstate commerce within California and throughout the United States. U.S. FDA has strengthened its import program in the last few years and now gives special attention to imported foods.

Residue Tolerances

The tolerances for residues on produce in California are the same as those established by the U.S. Environmental Protection Agency (U.S. EPA).

The tolerance is the highest residue level of a particular pesticide that is legally allowed on

a particular commodity. The purpose of the tolerance is to ensure that consumers are not exposed to unsafe levels of pesticide residues in food. Tolerances are based upon extensive toxicological information developed by the applicant for pesticide registration through test animals and actual field dissipation studies; this data is evaluated by qualified scientists at U.S. EPA.

The best way to avoid pesticide residue problems is to read and carefully follow the label instructions, as well as any laws or regulations that may govern a specific pesticide. It is desirable to consider what is being produced on adjoining property, properly choose the pesticide and the method of application, and confine the pesticide to the property being treated.

No pesticide residue is justified or permitted on produce unless a tolerance has been established for that specific pesticide/produce combination, or the Director has authorized an exemption from a tolerance.

Parts Per Million (PPM)

Pesticide residues are normally measured in parts per million. One part per million equals one part of a chemical per million parts of the commodity. In general, pesticide residues are measurable at a minimum detectable level of 0.01 ppm.

Tolerances for Combination of Pesticide Residues

Agricultural commodities can be quarantined and/or prohibited from harvest due to a combination of related or unrelated pesticide residues:

Example #1: Related Pesticide Residue Combination

Consider a lettuce crop treated with pesticide X and pesticide Y, both organophosphates. The tolerance for pesticide X on lettuce is 2 ppm and the tolerance for pesticide Y is 7 ppm; one lot of packed lettuce was found to carry 1 ppm pesticide X and 4 ppm pesticide Y. Related chemical residues are added on a percentage basis:

Pesticide	Tolerance	Residue	Residue in Percent of Tolerance
X	2 ppm	1 ppm	50.0
Y	7 ppm	4 ppm	57.1
			107.1

One ppm is 50 percent of 2 ppm, and 4 ppm is 57.1 percent of 7 ppm. When 50 percent and 57.1 percent are added together, the result is 107.1 percent. This lot is in violation because the combined residues exceed 100 percent of the tolerance for organophosphates.

Example #2: Unrelated Pesticide Residue Combination

Consider what happens if the residue found on this lot of lettuce had been 1 ppm Pesticide

Pesticide	Tolerance	Residue	Residue in Percent of Tolerance
A	1 ppm	1 ppm	100
B	2 ppm	2 ppm	100

A, an organophosphate, and 2 ppm Pesticide B, a chlorinated hydrocarbon. This time the lettuce is legal because unrelated pesticides are not added on a percentage basis. Therefore, 100 percent of each type is legal.

Quarantine

When an agricultural commodity is found to carry pesticide residues in excess of the legal tolerance or found to have a residue for which there is no tolerance established, it is quarantined and removed from sale and distribution; the grower and/or the packer/shipper are then subject to prosecution. The quarantined lot cannot be moved or disposed of without approval from the Department.

Seizure

A crop, commodity, or site that has been treated with an economic poison not registered for use on that crop, commodity, or site, is a public nuisance and may be seized by the Director to prevent harvest or sale of the crop or commodity, or planting of the site.

Commercial Laboratories

Many growers and chemical firms utilize the services of the commercial laboratories that provide pesticide residue analysis. All laboratories that analyze produce for pesticide residues must be accredited by the Department of Health Services. The names and locations of these laboratories can be obtained by contacting your local county agricultural commissioner.

Review Questions

1. What is a pesticide residue?

2. Who monitors produce for pesticide residues?

3. What is a tolerance?

4. What is the purpose of a tolerance?

5. How can pesticide residue problems be avoided?

6. What is meant by "related pesticide residues" with respect to combinations of residues for legal tolerances?

Chapter X. Ground Water Protection and the Endangered Species Act

One goal of the Department of Pesticide Regulation and that of Cal/EPA and the U.S. Environmental Protection Agency is to prevent contamination of ground water resources. Such contamination, resulting from normal, registered use of pesticides, can cause unreasonable risks to human health and the environment. This goal can be reached by designing a program to stop ground water contamination before it happens and keeping existing problems from getting worse. This chapter discusses the laws and regulations that have been established to prevent pesticide contamination of the ground water aquifers in California which may be used for drinking water supplies.

Chemicals on the Ground Water Protection List

The Ground Water Protection List is a list of pesticides labeled for agricultural, outdoor institutional, or outdoor industrial use that have the potential to pollute ground water (See ***Appendix X-1***). This list is found in California Code of Regulations - Section 6800(**a**), and includes pesticides that have been detected in ground water or soil:

1. Atrazine
2. Simazine
3. Bromacil
4. Diuron
5. Prometon (Pramitol)
6. Bentazon (Basagran®)

The following list of chemicals which are specified in Section 6800(**b**) are designated as having the potential to pollute ground water:

1. Cyanazine
2. Fenamiphos (Nemacur®)
3. Fluometuron
4. Linuron
5. Methiocarb
6. Methomyl
7. Metolachlor
8. Metribuzin
9. Naptalam, sodium salt
10. Pebulate (Tillam)
11. Vernolate (Surpass, Vernam)

Pesticide Management Zone (PMZ)

A Pesticide Management Zone (PMZ) is a geographical area of approximately one square mile which is sensitive to ground water pollution. PMZs have been established in the following counties: Contra Costa, Fresno, Glenn, Los Angeles, Merced, Orange, Riverside, Stanislaus, Tehama, and Tulare. (See ***Appendix X-2***). A list of the established PMZs in California is available through the local county agricultural commissioner or the Department of Pesticide Regulation.

Ground Water Protection Restrictions

A permit is required for possession or use of a pesticide containing Atrazine, Simazine, Bromacil, Diuron, Prometon, or Bentazon when it is intended for agricultural, outdoor institutional or outdoor industrial use within a PMZ.

However, a permit will not be issued for use of a pesticide containing Atrazine, Simazine, Bromacil, Diuron, Prometon, or Bentazon in a PMZ, unless the applicant for the permit submits a Ground Water Protection Advisory. The advisory must be written by a licensed Agricultural Pest Control Adviser who has completed the Ground Water Protection Training Program.

A permit is not required for use of a pesticide containing Atrazine, Simazine, Bromacil, Diuron, Prometon, or Bentazon when the pesticide is used in a pest eradication program approved by the Department, unless the pesticide is also restricted for purposes other than ground water protection.

Research Authorization for Ground Water Protection Chemicals

The Director may authorize specific applications of pesticides containing Atrazine, Simazine, Bromacil, Diuron, Prometon, and Bentazon within a PMZ for the purpose of research or experimentation. Any person wishing to conduct such research or experimentation must apply to the Director by submitting a completed "Research Authorization - Pesticide Form" and having the project approved.

Dealer Requirements for Ground Water Protection Chemicals

Under those circumstances when a permit is required for the possession or use of pesticides containing Atrazine, Simazine, Bromacil, Diuron, Prometon, or Bentazon, the dealer must obtain a copy of the restricted materials permit from the purchaser prior to sale. These records must be maintained by the dealer for two years.

Prior to the sale of a pesticide containing Atrazine, Simazine, Bromacil, Diuron, Prometon, or Bentazon, the dealer must obtain and retain for two years a signed statement from the purchaser in substantially the following form:

PESTICIDE SALES: GROUND WATER PROTECTION

☐ The material I am purchasing will not be used in a Pesticide Management Zone (as described in Section 6802, Title 3, California Code of Regulations) for agricultural, outdoor institutional, or outdoor industrial use.

☐ The material I am purchasing will be used in a Pesticide Management Zone (as described in Section 6802, Title 3, California Code of Regulations) for agricultural, outdoor institutional or outdoor industrial use and a copy of my restricted materials permit is attached.
Material(s) purchased: _____

I certify under penalty of perjury that the foregoing statement is true, and that I will not apply any material listed in Section 6800 (a) in any Pesticide Management Zone for agricultural, outdoor institutional or outdoor industrial uses except in accordance with a permit issued by the county agricultural commissioner or the Director in a county in which there is no county agricultural commissioner.

_____ _____

Purchaser Date

Sales Reporting. Each licensed Pest Control Dealer must maintain records of all sales filed by the purchaser for two calendar years of all pesticides listed under the "Ground Water Protection List," and as specified in Section 6800(a) and (b).

Pesticide products that may be sold without a pest control dealer's license are exempt from the reporting requirement.

Requirements for Agricultural Pest Control Advisers

A ground water protection advisory may only be written by a licensed Agricultural Pest Control Adviser who has completed the Ground Water Protection Training Program approved and administered by the Department. A licensed Agricultural Pest Control Adviser must file written proof of completion of the approved Ground Water Protection Training Program completed within the past two calendar years in each county in which the adviser intends to make ground water protection advisories. The Ground Water Protection Training Program is scheduled and announced at least once a year.

Records. The adviser must retain one copy of each ground water protection advisory for agricultural, outdoor institutional, or outdoor industrial use he/she writes for one year following the date of such advisory. The advisory must be available to the Director and the county agricultural commissioner upon request. A copy of the advisory must be furnished to the owner or operator of the property in order to obtain a permit for use of the Ground Water Protection List chemical in the PMZ.

Advisories for Ground Water Protection. Each ground water protection advisory must be in writing and specific to any one of the following chemicals: Atrazine, Simazine, Bromacil,

Diuron, Prometon, or Bentazon. (This Ground Water Protection List is subject to change. Consult with the county agricultural commissioner or Director for updates.)

*Each advisory must include:

1. The name and address of the owner or operator of the property to be treated;

2. The location of each property to be treated, including the designation by base meridian, township, range and section;

3. The basic soil textural class (such as sandy loam, silty clay loam, or clay) for each site on the property to be treated;

4. A map of the property to be treated, identifying all known areas that could impact the movement of the chemical to ground water including, but not limited to, abandoned and surface drainage (dry) wells, and irrigation and domestic wells;

5. The conditions for the property to be treated in relation to basic soil textural class, irrigation practices, and the location of wells, including but not limited to abandoned and surface drainage (dry) and irrigation and domestic, to minimize the movement of the chemical to ground water; and

6. The signature and address of the agricultural pest control adviser writing the advisory and the date and license number of the agricultural pest control adviser.

**The information listed above is separate from the requirements of writing a recommendation.*

The Endangered Species Act

The objective of the Federal Endangered Species Act, enacted in 1973, is to protect endangered and threatened plant and animal species, and to conserve the ecosystem that is depended upon by the endangered or threatened plant or animal. In 1986, the U.S. EPA created the Endangered Species Protection Program to protect endangered species from any potential adverse effects of pesticide use. The program was to implement the Endangered Species Act, which requires all Federal agencies to ensure that any act they carry-out or authorize will not be likely to further jeopardize the continued existence of any endangered species, or destroy or adversely modify its habitat. U.S. EPA is following a species approach (as opposed to crop clusters), prioritized according to the vulnerability of the plant or animal, and will also determine the lowest level of pesticide use which may affect the species. On March 14, 1991, the U.S. EPA published a notice in the Federal Register, listing pesticides that "may affect" endangered species. A map providing details of locations throughout California of threatened and endangered plant and animal species can be seen in ***Appendix X-3***. For additional information on implementation of the Endangered Species Act which may affect your area, contact your local county agricultural commissioner.

Review Questions

1. What six chemicals have been designated as having the potential to pollute ground water and have been detected in ground water or soil?

2. What is a Pest Management Zone?

3. When is a permit required for possession or use of a pesticide containing any of the six ground water protection materials?

4. A permit will not be issued for use of a pesticide containing any of the six ground water protection materials unless the applicant for the permit submits what to the county agricultural commissioner?

5. Prior to the sale of a pesticide containing any of the ground water protection materials, what must the dealer obtain?

6. What information is a licensed Pest Control Dealer required to report to the Director?

7. Any licensed Agricultural Pest Control Adviser may write a Ground Water Protection Advisory.

   True or False

8. How long must a licensed Agricultural Pest Control Adviser retain a copy of each ground water protection advisory?

9. To whom must the licensed Agricultural Pest Control Adviser furnish a copy of the advisory?

Chapter XI. Minimal Exposure Pesticides

Certain pesticides are classified as Minimal Exposure Pesticides because of their toxicological properties. Minimal Exposure Pesticides are those which present hazards that are not mitigated by their labeling. Therefore, by regulation, these pesticides are classified as minimal exposure pesticides, and special use requirements are developed in order to reduce worker exposure to the pesticides and mitigate the hazards associated with their uses. Please see ***Appendix XI-1*** for additional information on Minimal Exposure Pesticides.

Minimal Exposure Pesticides are listed in 3 CCR Section 6790. At this time, there are four pesticides designated by the Director as Minimal Exposure Pesticides: Bromoxynil (Buctril, Bronate); Folpet; Oxydemeton-methyl (Metasystox-R); and Propargite (Omite, Omite CR, Comite).

Exemptions. Folpet, when contained in or added to paints, coatings, or caulking compounds, is exempt from the Minimal Exposure Pesticide requirements.

Conditions of Use. Applications of oxydemeton-methyl to ornamental landscape trees and shrubs must be made by trunk injection or soil injection methods only. Also, oxydemeton-methyl and Propargite cannot be applied within a greenhouse.

Minimal Exposure Pesticide Safety Use Requirements

Change Area. The employer must provide a clothing change area for employees who handle Minimal Exposure Pesticides for any period of time, regardless of the toxicity category of the product used. The employer must provide, at the place where the employees complete their workday, an area where employees can change their clothes and wash themselves. Clean towels, soap and adequate water must be available to allow for thorough washing. The employer must instruct his/her employees to thoroughly shower with warm water and soap as soon as possible after the end of each work shift. The employer must also provide a clean, pesticide-free place where employees may store any personal clothing not in use while at work handling Minimal Exposure Pesticides.

Washing Facilities. The employer must provide washing facilities where minimal exposure pesticides are mixed or loaded, regardless of the toxicity category of the product used. The employer must provide clean water, soap and towel(s) for routine washing of hands and face, and for emergency washing of the entire body, at the mixing or loading work site. A minimum of 10 gallons of water must be present at the beginning of each workday for one employee and a minimum of 20 gallons for two or more employees. This water must be stored separately from that used for mixing with pesticides, unless the tank holding water for mixing

with pesticides is equipped with appropriate valves to prevent back flow of pesticides into the water. Any other easily available supply of clean water within 100 feet of the mixing and loading site will also satisfy this requirement to provide washing facilities.

Work Clothing. The employer must provide and maintain work clothing and require it to be worn by employees who handle minimal exposure pesticides, regardless of the toxicity category of the product used. The employer must ensure that:

1. Employees start each work day wearing clean work clothing. In addition, the employer must provide, at the mixing and loading site, at least one change of clean work clothing.

2. Employees change out of their work clothing and wash at the end of the work day.

3. Potentially contaminated work clothing, removed at the work site or headquarters, is not taken home by employees.

4. Employees, whose work day does not involve returning to their employer's headquarters, must remove and store contaminated work clothing in a sealable container outside of their own living quarters for later return to the employer.

It is the employer's responsibility to provide for the cleaning of work clothing and informing the person (or firm) doing the laundry that he/she will receive pesticide-contaminated clothing which should be laundered separately.

Full Body Chemical Resistant Protective Clothing. The employer must provide and require employees to wear full-body, chemical-resistant protective clothing when handling minimal exposure pesticides. This clothing must cover the torso, head, arms, legs, and feet of the employee. Employees working in the following situations are not required to wear full-body, chemical-resistant protective clothing, but this clothing must be present at the work site:

1. Employees using a closed system, or sealed water soluble packets, while mixing, loading or transferring these pesticides. These employees must wear a chemical-resistant apron, chemical-resistant gloves, and chemcial-resistant boots.

2. Employees working as applicators or flaggers in enclosed vehicles.

3. Applicators using vehicle-mounted or towed equipment to inject or incorporate these pesticides into the soil.

4. Applicators using equipment with vehicle-mounted spray nozzles directed downward and located below the level of the employee.

Closed Systems

The employer must provide a closed system (see ***Appendix III-6***), and require its use by all

employees who mix, load, or transfer liquid formulations or load diluted liquid mixture derived from dry formulations of minimal exposure pesticides, regardless of the toxicity category of the product used.

The closed system requirement does not apply to employees who handle a total of one gallon or less of these pesticides per day exclusively in the original containers of one gallon or less.

Respiratory Protection

The employer must provide and require employees to wear respiratory protection when engaged in:

1. Hand application or ground application of minimal exposure pesticides.

2. Flagging during an application of a minimal exposure pesticide (except flaggers in enclosed vehicles).

3. Mixing and loading dry formulations of minimal exposure pesticides (except mixers or loaders using sealed water soluble packets).

Exempt from this respiratory protection requirement are:

1. Applicators using vehicle-mounted or towed equipment to inject or incorporate minimal exposure pesticides into the soil.

2. Applicators using equipment with vehicle-mounted spray nozzles directed downward and located below the level of the employee.

This respiratory equipment provided by the employer to his/her employees must meet the requirements described in Chapter VI of this study guide.

All protective clothing and equipment shall be cleaned inside and out, or discarded at the end of the day's use.

Review Questions

1. What four pesticides have been classified as Minimal Exposure Pesticides?

2. Why have these pesticides been classified as minimal exposure?

3. What toxicity category of these pesticides fall under these minimal exposure requirements?

4. When is a closed system required to be used?

5. Full body chemical resistant protective clothing must be worn when handling minimal exposure pesticides. This protective clothing must cover what areas of the body?

Chapter XII. Mill Assessments and Product Quality

Mill Assessment

California law requires the person who first sells a registered economic poison labeled for agricultural use into or within the State, whether a registrant, pesticide broker, or pest control dealer to pay quarterly, to the Director, an assessment based upon the dollar sales of the registered pesticide product(s). For registered economic poisons labeled for nonagricultural use, the registrant who sells into or within California must pay quarterly, to the Director, an assessment based upon the dollar sales of the registered pesticide product(s). The California Food and Agricultural Code allows the Director to set the assessment not to exceed twenty-two mills, or 2.2 cents per dollar sales. The registrant, pesticide broker, or pest control dealer who paid the mill assessment for the registered economic poison labeled for agricultural use must state that the assessment was paid on the sales invoice as a line item, and is the only person who can include it as a line item on the sales invoice. Language similar to the following should appear on the California sales invoice as a line item for registered economic poisons labeled for agricultural use:

The California mill assessment of 22 mills ($0.022) will be paid by (Registrant, Pesticide Broker, or Pest Control Dealer name).

This assessment is not required on pesticide sales intended and labeled for further formulation as a registered pesticide, as would be the case for pesticides labeled "manufacturing use only."

A portion of the money received from this assessment is reimbursed to the counties for costs incurred in administering and enforcing pesticide laws and regulations. The remaining money is retained by the Director to help finance the Department's Pesticide Enforcement Program. For additional information, see ***Appendix II-2*** for the Mill Assessment Program for Registrants, Pesticide Brokers, and Pest Control Dealers flow chart.

Pesticide Product Quality Enforcement

To ensure that pesticides are registered, properly labeled, and meet their guaranteed analysis as stated on the label, Department specialists randomly conduct inspections to examine the pesticide product labeling and collect samples of the products for product quality analysis. If the pesticide product is found to be in violation, a Notice of Violation citing the particular violation(s) is issued to the party who has possession of the product; the registrant is then notified. This Notice informs both parties of the violation(s) and that continued sales or distribution would be in violation of the Food and Agricultural Code, subjecting them to prosecution.

Review Questions

1. Who pays quarterly, to the Director, an assessment based upon the dollar sales of a registered pesticide product?

2. The assessment received by the Department is used for what purpose?

3. Mill assessments are established by the Food and Agricultural Code.

   True or False.

4. Name three reasons why DPR specialists conduct random inspections of pesticide products.

5. If a pesticide product is found to be in violation, how is the responsible party cited?

Appendix

Appendix I-1: Pesticide Laws and Regulations Enforcement/Compliance Options Summary

Appendix I-2: Range of Proposed Agricultural Civil Penalties

Appendix I-3: Agricultural Civil Penalties: Types and Frequency of Sections Cited

Appendix I-4: Occupational Summary of Agricultural Civil Penalties

Appendix II-1: Roles and Responsibilities of the Department of Pesticide Regulation

Appendix II-2: Mill Assessment Program for Registrants, Pesticide Brokers, and Pest Control Dealers flow chart

Appendix III-1: California Restricted Materials Requirements

Appendix III-2: Private Applicator Certification Statement form

Appendix III-3: Restricted Materials Permit flow chart

Appendix III-4: Restricted Materials Permit System (Nonagricultural use) flow chart

Appendix III-5: Restricted Materials Permit System (Agricultural use) flow chart

Appendix III-6: Pesticide Safety Information Series (A-1 through A-10, B-1)

Appendix IV-1: Qualified Applicator License Pest Control Categories & QAL flow chart

Appendix IV-2: Qualified Applicator Certificate Pest Control Categories & QAC flow chart

Appendix IV-3: Use Reporting Summary (Production Agriculture; Nonproduction Agriculture; Livestock, Poultry, and Fish Producer Responsibilities flow charts)

Appendix IV-4: Maintenance Gardener Pest Control Business License flow chart

Appendix IV-5: Pest Control Business License flow chart

Appendix IV-6: Structural Pest Control Operator flow chart

Appendix IV-7: Structural Pest Control Field Representative flow chart

Appendix IV-8: Registered Structural Pest Control Company flow chart

Appendix IV-9: General Applicator flow chart

Appendix IV-10: Pest Control Dealer License flow chart

Appendix IV-11: Pest Control Dealer Designated Agent License flow chart

Appendix IV-12: Pesticide Broker License flow chart

Appendix IV-13: Aircraft Pilot Pest Control Certificate flow chart

Appendix IV-14: Agricultural Pest Control Adviser License flow chart

Appendix IV-15: Pest Control Recommendation form

Appendix IV-16: Continuing Education Record Renewal Summary form

Appendix IV-17: Adviser and Applicator Continuing Education Requirement Summary

Appendix VI-1: Sample Material Safety Data Sheets

Appendix VI-2: Employee Pesticide Safety Training Record form

Appendix VII-1: Employer Responsibilities for Employees chart; Employee Training flow chart; Hazard Communication for Field Workers flow chart; Hazard Communication for Pesticide Handlers flow chart; and Notice flow chart

Appendix VII-2: Sample Crop Sheets

Appendix VII-3: Pesticide Use Reporting flow charts (County Agricultural Commissioner Responsibilities; Dealer Responsibilities; Pest Control Operators Responsibilities; and Property Operator Responsibilities)

Appendix IX-1: Pesticide Applicators Responsibilities: Post Harvest Commodity Treatment flow chart

Appendix X-1: Ground Water Protection List

Appendix X-2: Ten Counties in California with Sections of Land Established as Pesticide Management Zone

Appendix X-3: California Map Showing the Location of Threatened and Endangered Species

Appendix XI-1: Minimal Exposure Pesticides

County Agricultural Commissioners Office Addresses

Cooperative Extension Office Addresses

Department of Pesticide Regulation Telephone and Room Numbers

Glossary of Terms

STATE OF CALIFORNIA

PESTICIDE LAWS AND REGULATIONS ENFORCEMENT/COMPLIANCE OPTIONS SUMMARY

(REV. 7/93)

DEPARTMENT OF PESTICIDE REGULATION
PESTICIDE ENFORCEMENT BRANCH
1020 N STREET, ROOM 300
SACRAMENTO, CALIFORNIA 95814-5624

A. ENFORCEMENT SUMMARY

ENFORCEMENT OPTIONS	WHO IS AFFECTED	PENALTY (Authority)	WHO TAKES ACTION	COMMENTS
CRIMINAL (County)	• Any person who violates the FAC pesticide laws and regulations	• Division 6: $500 - $5,000 per violation and/or 10 days to 6 months imprisonment (FAC Section 11891) • Division 7: $500 - $50,000 per violation and/or up to 1 year imprisonment (FAC Section 12996)	• County District Attorney • City Prosecutor/Attorney	Any violation the commissioner believes is of countywide or statewide significance may be considered for criminal action.
CIVIL (State)	• Any person who violates the FAC pesticide laws and regulations	• Division 6: $1,000 - $10,000 per violation (FAC Section 11893) • Division 7: $1,000 - $25,000 per violation (FAC Section 12998)	• State Department of Pesticide Regulation (through the State Attorney General) • State Attorney General	Any violation the commissioner believes is of county- wide or statewide significance may be considered for civil action.
ADMINISTRATIVE ACTIONS (State)	• Licensees • Certificate Holders • Registrants	• Refuse, revoke, or suspend license and/or certificate (FAC, Sections depend on type of license or certificate) • Director may cancel or refuse to issue certificate of registration (FAC Sections 12825 and 12827)	• State Department of Pesticide Regulation	
ADMINISTRATIVE ACTIONS (County)	• Licensees • Certificate Holders • Permittees	• Refuse, revoke, or suspend county registration (FAC, Sections depend on type of license or certificate) • Refuse, revoke, or suspend restricted materials permit (FAC Section 14008)	• County Agricultural Commissioner	
AGRICULTURAL CIVIL PENALTIES (County)	• Any person who violates certain FAC pesticide laws and regulations or Labor Code Section 1695(a)(1), (2), or (8)	• Penalties up to $1,000 per violation (FAC Section 12999.5)	• County Agricultural Commissioner	The amount of the agricultural civil penalty is related to the seriousness of the violation and the potential for harm to public health and safety (ref. Title 3, CCR Section 6130). If the violation caused human death or illness or substantial environmental or property damage, criminal or civil action should be considered instead of an agricultural civil penalty.
	Any person who violates FAC Sections 12671 or 12993	• Penalties up to $5,000 per violation (FAC Section 12999.4)	• State Department of Pesticide Regulation	In lieu of civil prosecution, the Director may levy a civil penalty against a person violating FAC Sections 12671 or 12993.
STRUCTURAL CIVIL PENALTIES (County)	• Structural Pest Control Licensees and Registered Companies	• Penalties up to $500 per violation or suspend right to work up to 3 working days per violation (FAC Section 15202; B & P Section 8617)	• County Agricultural Commissioner • Structural Pest Control Board	

ENFORCEMENT OPTIONS	*WHO IS AFFECTED*	*PENALTY (Authority)*	*WHO TAKES ACTION*	*COMMENTS*
SEIZE/HOLD PRODUCE (Crop Quarantine)	• Growers, packers and sellers	• Seize and hold any lot of produce that exceeds or is suspected of exceeding pesticide residue tolerance (FAC Section 12601)	• State Department of Pesticide Regulation	In some situations produce with illegal residue can be reconditioned.
CROP ABATEMENT (Civil Action)	• Growers, packers and sellers	• Destroy any lot of produce that exceeds pesticide residue tolerance (FAC Sections 12642, 12643)	• State Department of Pesticide Regulation (through County District Attorney)	Requires court order to abate.
CROP SEIZURE	• Growers, packers and sellers	• Seize and destroy any plant, crop, commodity or site treated with a pesticide not registered for use on the plant, crop, commodity or site (FAC Section 12648)	• State Department of Pesticide Regulation	
PROHIBIT PRODUCE HARVEST (Preharvest Intervals)	• Growers	• Delay harvest until expiration of preharvest interval (FAC Section 12672)	• County Agricultural Commissioner • State Department of Pesticide Regulation	
PROHIBIT PRODUCE HARVEST (Pesticide Residue)	• Growers	• Delay harvest until produce does not carry pesticide residue in excess of a permissible tolerance (FAC Section 12673)	• County Agricultural Commissioner • State Department of Pesticide Regulation	
PESTICIDE SEIZURE	• Person in possession of pesticide	• Seize and quarantine pesticides that are adulterated, misbranded, not registered by the Director, etc. (FAC Section 12961)	• State Department of Pesticide Regulation	

B. COMPLIANCE SUMMARY

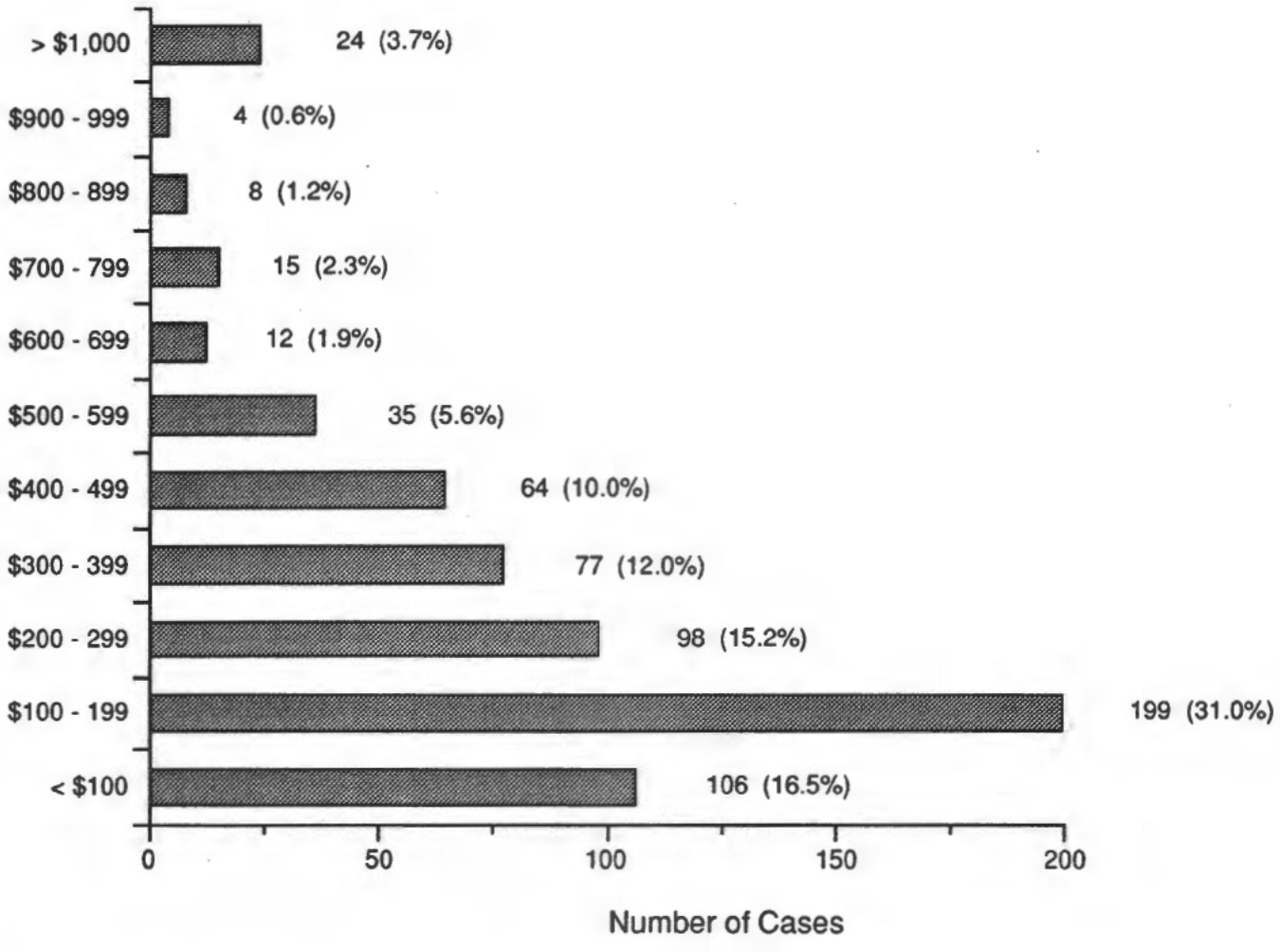
COMPLIANCE OPTIONS	*WHO IS AFFECTED*	*PENALTY (Authority)*	*WHO TAKES ACTION*	*COMMENTS*
◦ CEASE and DESIST ◦ VIOLATION NOTICE ◦ COMPLIANCE INTERVIEW ◦ WARNING LETTER ◦ INSPECTION FORM NONCOMPLIANCE	• Any person who violates the FAC pesticide laws and regulations	• No monetary penalty Cease and Desist: Division 6: (FAC Sections 11737, 11896, 11897) Division 7: (FAC Sections 13101, 13012)	• State Department of Pesticide Regulation • County Agricultural Commissioner	

DEPARTMENT OF PESTICIDE REGULATION

Range of Proposed Agricultural Civil Penalties

July 1, 1993 - June 30, 1994

The graph below depicts the range of proposed fines of Agricultural Civil Penalties for Fiscal Year 1993/94. Fines may be levied for each count from $50 to $1,000. The proposed fines for a case represented in the graph may include one or more counts. The proposed fines ranged from $50 to $3,500.

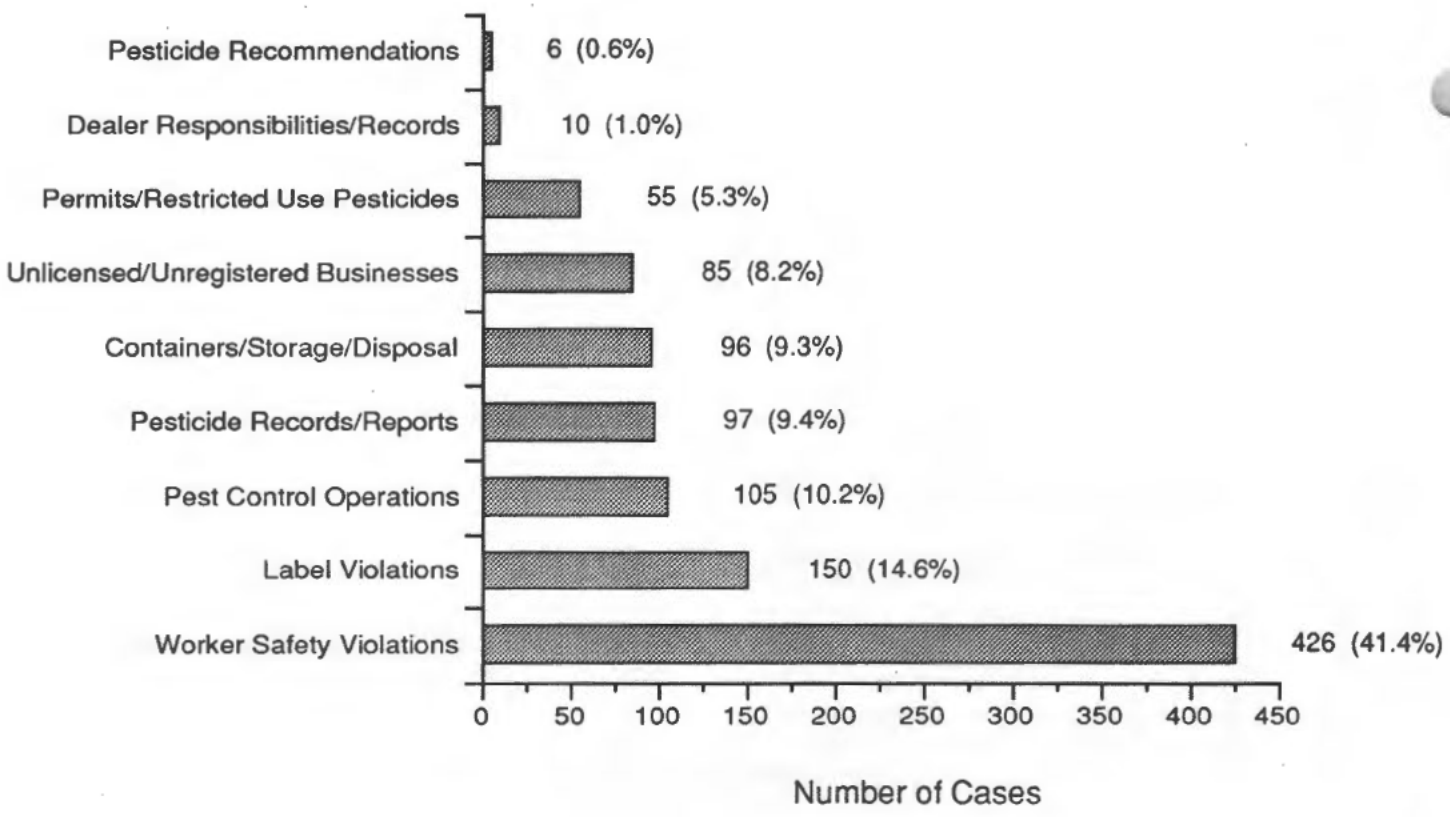


DEPARTMENT OF PESTICIDE REGULATION

Agricultural Civil Penalties: Types and Frequency of Sections Cited

July 1, 1993 - June 30, 1994

Shown below are the most common types of sections cited under the Agricultural Civil Penalty (ACP) Program. Citable sections are grouped into 9 violation categories listed below. These categories represent sections of the Food and Agricultural Code and California Code of Regulations which are similar, and therefore, grouped together.

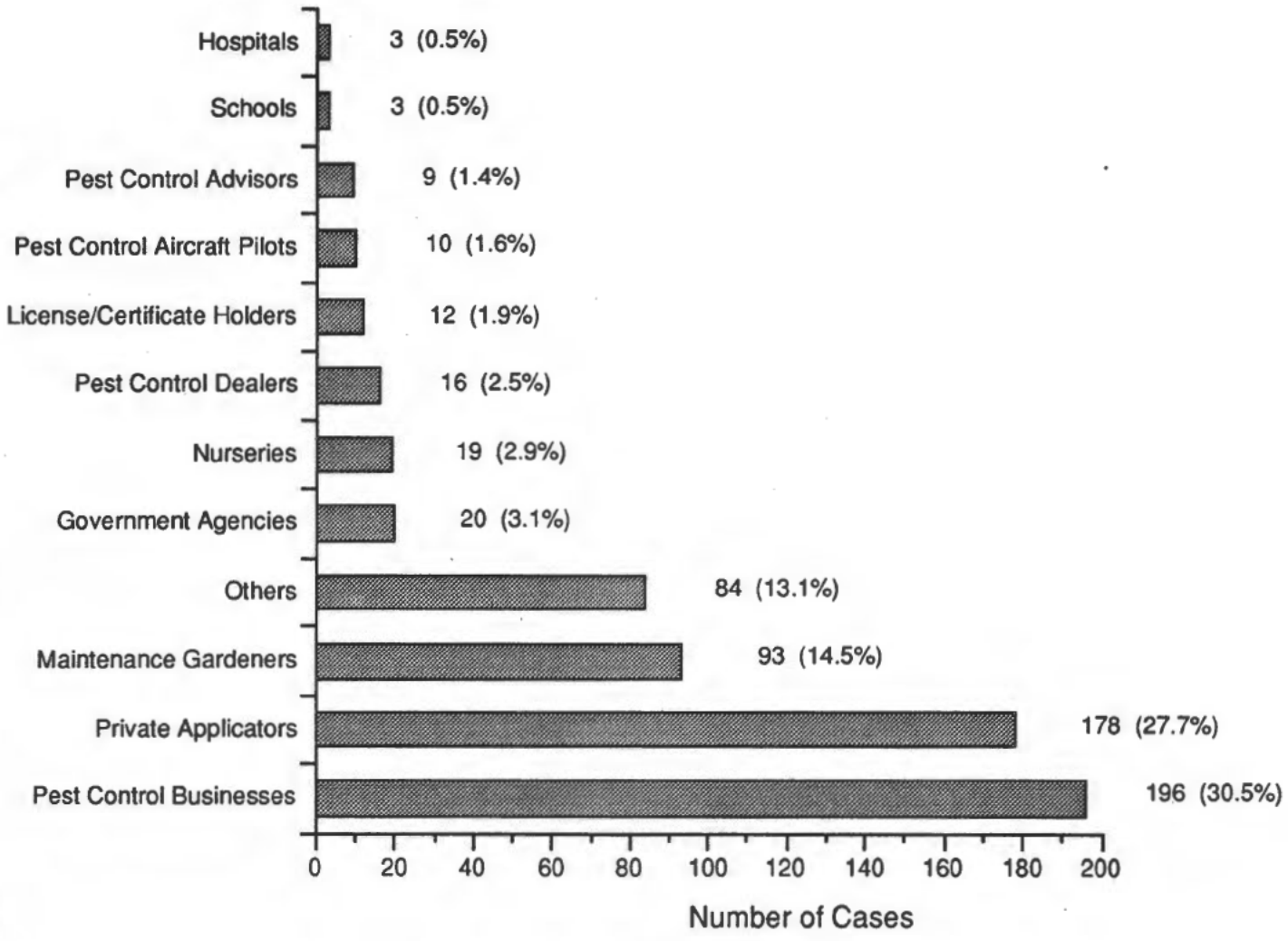


DEPARTMENT OF PESTICIDE REGULATION

Occupational Summary of Agricultural Civil Penalties

July 1, 1993 - June 30, 1994

Listed below are the most common occupational groups that handle pesticides in some manner and the number of agricultural civil penalty cases levied against them. It should be noted that there are more inspections conducted on some occupational groups than others, thus the number of cases shown does not necessarily represent the actual violative rate of that group.



California Environmental Protection Agency

Department of Pesticide Regulation

Cal/EPA's Department of Pesticide Regulation (DPR) has primary responsibility for regulating all aspects of pesticide sales and use to protect public health and the environment. The Department's mission is to evaluate and mitigate impacts of pesticide use, maintain the safety of the pesticide workplace, ensure product effectiveness, and encourage the development and use of reduced-risk pest control practices while recognizing the need for pest management in a healthy economy.

Department programs are in three divisions. The Registration and Health Evaluation Division has three branches: Pesticide Registration, Medical Toxicology, and Worker Health and Safety. The three branches of the Enforcement, Environmental Monitoring, and Data Management Division are Pesticide Use Enforcement, Environmental Monitoring and Pest Management, and Information Systems. The Division of Administrative Services includes two branches: Audits and Resources Management.

Evaluating and Registering Pesticides

Before a pesticide can be sold or used in California, it has to be evaluated and registered by DPR. Pesticide manufacturers are required to submit studies of toxicology, efficacy, phytotoxicity, environmental fate, product chemistry, and residue methodology to support the registration of each product. The elaborate testing data are evaluated by DPR scientists, including biologists, chemists, plant physiologists, entomologists, toxicologists, and physicians. Much of the evaluation and scrutiny focuses on the acceptability of studies and any potential for these substances to cause adverse health or environmental effects, in order to ensure the proper, safe, and efficient use of pesticides.

These and other data are the basis for determining potential risk and adequate margins of safety for workers and others who may be exposed to pesticide residues. DPR scientists work closely with other state agencies, including the departments of Fish and Game and Health Services, as well as agencies within Cal/EPA, including the State Water Resources Control Board, Department of Toxic Substances Control, Air Resources Board and Office of Environmental Health Hazard Assessment.

Protecting Workers and the Public

DPR scientists evaluate potential workplace hazards of pesticides, reviewing studies on active and inert ingredients in pesticide products and on application methodologies. In addition, the Department conducts field studies each year to monitor pesticide exposure to workers in order to develop better methods to evaluate exposure potential and to mitigate potentially excessive exposure. DPR physicians also provide medical advice and assistance on pesticide exposures,

and act as liaison with practicing physicians regarding pesticide illness and treatment. The Department also participates in and evaluates the results of investigations of pesticide-related illnesses, with an emphasis on preventing occupational illnesses and injuries.

Environmental Protection and Pest Management Alternatives

DPR scientists monitor the environmental fate of pesticides, and identify and analyze chemical, cultural and biological alternatives for managing pests. In doing so, DPR's goal is to protect the public and the environment from pesticide contamination through hazard identification, preventive planning, and the enhancement of regulatory controls through encouraging development and use of pest control practices that are both environmentally sound and effective.

Enforcing Pesticide Laws

To assure compliance with the nation's toughest pesticide laws, California has the largest and best-trained enforcement organization in the nation. DPR oversees licensing and certification of dealers, pest control advisors, pest control businesses and applicators; has overall responsibility for pesticide incident investigations; administers the nation's largest state pesticide residue monitoring program; monitors pesticide product quality; and coordinates pesticide use reporting.

Enforcement activities in the field are largely carried out by the county agricultural commissioners and their staffs, with training, coordination, and technical and legal support provided by headquarters personnel, as well as DPR field staff in Anaheim, Fresno, Berkeley, Sacramento, Goleta and Watsonville.

California Department of Pesticide Regulation, 1020 N Street, Sacramento, CA 95814-5624
GENERAL INFORMATION: (916) [redacted]

Division of Administrative Services, (916) [redacted] **Personnel Office,** (916) [redacted]

Division of Enforcement, Environmental Monitoring & Data Management
[redacted]

Branches:
Environmental Monitoring and Pest Management
Pesticide Enforcement
Information Systems
[redacted]

Division of Registration and Health Evaluation
[redacted]

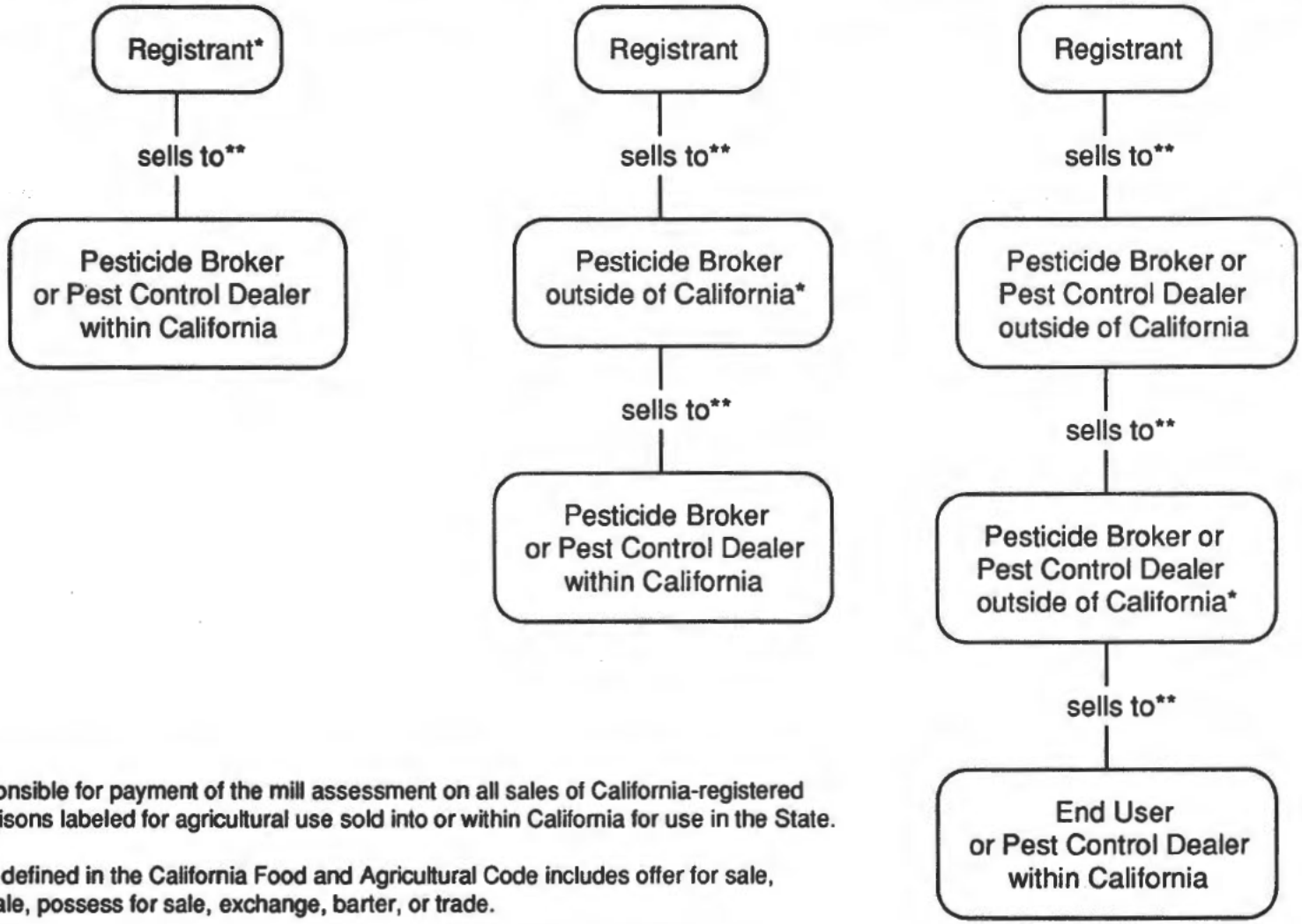
Branches:
Worker Health and Safety

Medical Toxicology
Pesticide Registration
[redacted]

Printed on recycled paper

Department of Pesticide Regulation
Mill Assessment Program for
Registrants, Pesticide Brokers, and Pest Control Dealers

THE REGISTRANT, PESTICIDE BROKER, OR PEST CONTROL DEALER who first sells an economic poison labeled for agricultural use, into the State
of California, is responsible for payment of the mill assessment in accordance with Article 1.5 (commencing with Section 12115, Chapter 7 of Division 6 of the Food and Agricultural Code). A registrant located in California who sells to pesticide brokers or pest control dealers in California is responsible


Registrant*
sells to**
Pesticide Broker or Pest Control Dealer within California
Registrant
sells to**
Pesticide Broker outside of California*
sells to**
Pesticide Broker or Pest Control Dealer within California
Registrant
sells to**
Pesticide Broker or Pest Control Dealer outside of California
sells to**
Pesticide Broker or Pest Control Dealer outside of California*
sells to**
End User or Pest Control Dealer within California

* Party responsible for payment of the mill assessment on all sales of California-registered economic poisons labeled for agricultural use sold into or within California for use in the State.

** "Sells" as defined in the California Food and Agricultural Code includes offer for sale, expose for sale, possess for sale, exchange, barter, or trade.

CALIFORNIA RESTRICTED MATERIALS REQUIREMENTS

A FEDERALLY RESTRICTED MATERIALS

(Included by reference as California Restricted Materials.)

PESTICIDES DISPLAYING THE STATEMENT SHOWN HERE OR A SIMILAR STATEMENT ON THE PRODUCT CONTAINER

RESTRICTED USE PESTICIDE
FOR RETAIL SALE TO AND APPLICATION ONLY BY A CERTIFIED APPLICATOR OR PERSONS UNDER THEIR DIRECT SUPERVISION

PRODUCTS BEARING THE "PHYSICALLY PRESENT" STATEMENT ON THE LABEL ARE REQUIRED TO HAVE A CERTIFIED APPLICATOR PHYSICALLY PRESENT AT THE USE SITE

B CALIFORNIA RESTRICTED MATERIALS

TRADE NAMES ARE INCLUDED IN THE INTEREST OF SIMPLICITY. OTHER PRODUCTS WITH THE SAME COMPOUND AS AN ACTIVE INGREDIENT ARE ALSO SUBJECT TO THE PERMIT REQUIREMENTS. REFER TO THE CALIFORNIA CODE OF REGULATIONS, TITLE 3, SECTION 6400.

ACROLEIN, WHEN LABELED AS AN AQUATIC HERBICIDE
ALDICARB (TEMIK)
ALL DUST (EXCEPT THOSE PRODUCTS CONTAINING ONLY EXEMPT PESTICIDES)**
ALUMINUM PHOSPHIDE (PHOSTOXIN)
ANY PESTICIDE CONTAINING ACTIVE INGREDIENTS LISTED UNDER SECTION 6800(a)[1], WHEN LABELED FOR AGRICULTURAL, OUTDOOR INSTITUTIONAL, OR OUTDOOR INDUSTRIAL USE
ANY PESTICIDE USED PURSUANT TO SECTION 18 OF FIFRA (EMERGENCY EXEMPTION)
4-AMINO PYRIDINE (AVITROL)
AZINPHOS-METYHL (GUTHION)
CALCIUM CYANIDE
CARBARYL (SEVIN)**
CARBOFURAN (FURADAN)
CHLOROPICRIN
DICAMBA (BANVEL)
DISULFOTON (DI-SYSTON)**
ENDOSULFAN (THIODAN)**
ETHOPROP (MOCAP), WHEN LABELED FOR TURF USE
FENAMIPHOS (NEMACUR)
LINDANE**
2-METHYL-4-CHLOROPHENOXYACETIC ACID (MCPA)
METAM SODIUM, WHEN LABELED FOR AGRICULTURAL PRODUCTION
METHAMIDOPHOS (MONITOR)
METHOMYL (LANNATE)**
METHYL BROMIDE
METHYL ISOTHIOCYANATE (MITC), WHEN LABELED FOR AGRICULTURAL PRODUCTION
MEVINPHOS (PHOSDRIN)
MOLINATE (ORDRAM)
OXYDEMETON-METHYL (METASYSTOX-R)
PARAQUAT (GRAMOXONE)
PARATHION-METHYL
PHORATE (THIMET)
PROPANIL
SODIUM CYANIDE
SODIUM FLUOROACETATE (COMPOUND 1080)
3-CHLORO-P-TOLUIDINE HYDROCHLORIDE (STARLICIDE)
STRYCHNINE**
SULFOTEPP
1,3-DICHLOROPROPENE (TELONE II)
THIOBENCARB (BOLERO)
TRIBUFOS (DEF, FOLEX)
TRIBUTYLTIN, WHEN LABELED FOR FOULING ORGANISMS IN AN AQUATIC ENVIRONMENT
2,4-DICHLOROPHENOXYACETIC ACID (2,4-D)
2,4-DICHLOROPHENOXYBUTYRIC ACID (2,4-DB)
2,4-DICHLOROPHENOXYPROPIONIC ACID (2,4-DP)
ZINC PHOSPHIDE**

APPLICATORS WHO HAVE MET THE CERTIFICATION REQUIREMENTS FOR CALIFORNIA RESTRICTED MATERIALS PURSUANT TO CCR SECTION 6704

CERTIFIED PRIVATE APPLICATORS

(GROWERS, NURSERYMEN AND OTHERS USING RESTRICTED PESTICIDES TO PRODUCE AGRICULTURAL COMMODITIES)

- HOLDERS OF A VALID RESTRICTED MATERIALS PERMIT

A PESTICIDES IN "A" ABOVE - PERMIT REQUIRED, NO EXEMPTIONS

B PESTICIDES IN "B" ABOVE - PERMIT REQUIRED, EXEMPTIONS APPLY

CERTIFIED COMMERCIAL APPLICATORS

(PERSONS OTHER THAN PRIVATE APPLICATORS USING RESTRICTED PESTICIDES)

- JOURNEYMAN PILOTS
- VECTOR CONTROL TECHNICIANS
- QUALIFIED APPLICATOR LICENSEES
- STRUCTURAL PEST CONTROL OPERATORS
- QUALIFIED APPLICATOR CERTIFICATE HOLDERS

A PESTICIDES ONLY IN "A" ABOVE - NO PERMIT REQUIRED

B PESTICIDES IN "B" ABOVE - PERMIT REQUIRED, EXEMPTIONS APPLY

EXEMPTIONS FROM RESTRICTION

** PRODUCTS LABELED ONLY FOR HOME, STRUCTURAL, INDUSTRIAL, INSTITUTIONAL OR PUBLIC AGENCY VECTOR CONTROL DISTRICTS USES.

- CARBARYL FORMULATED AS A BAIT
- FLY BAIT CONTAINING 1% METHOMYL OR LESS
- USE ON LIVESTOCK OR POULTRY
- A WAX BLOCK IMPREGNATED WITH CERTAIN RESTRICTED HERBICIDE
- DILUTED, READY-TO-USE SOLUTION OF CERTAIN RESTRICTED HERBICIDES
- ONE QUART OR LESS OF A PRODUCT CONTAINING CERTAIN RESTRICTED HERBICIDE IN A LIQUID FORMULATION
- ONE GALLON OR LESS OF A PRODUCT CONTAINING THE FOLLOWING PERCENTAGES OF RESTRICTED HERBICIDE IN A LIQUID FORMULATION:
  - 15% OR LESS DICAMBA
  - 15% OR LESS MCPA,
  - 15% OR LESS OF 2,4-D,
  - 15% OR LESS OF 2,4-DB, OR
  - 15% OR LESS OF 2,4-DP
- UP TO 50 POUNDS OF CERTAIN RESTRICTED HERBICIDE (PHENOXYL AND DICAMBA) CONTAINING 10% OR LESS OF ACTIVE INGREDIENT PREPARED FOR USE WITHOUT FURTHER DILUTION
- ONE POUND OR LESS OF A PRODUCT CONTAINING CERTAIN RESTRICTED HERBICIDE (PHENOXYL AND DICAMBA) IN A DRY FORMULATION

EXEMPTIONS FROM PERMIT REQUIREMENT

[1] PESTICIDES LISTED UNDER 3 CCR, 6800(a) (POTENTIAL TO POLLUTE GROUND WATER):

ATRAZINE	DIURON
BENTAZON	PROMETON
BROMACIL	SIMAZINE

NO PERMIT REQUIRED FOR CERTIFIED COMMERCIAL APPLICATORS USING THESE MATERIALS OUTSIDE OF A PESTICIDE MANAGEMENT ZONE.

Private Applicator Certification

(Actual size 8.5" x 5.5")

STATE OF CALIFORNIA
PRIVATE APPLICATOR CERTIFICATION STATEMENT
PR-ENF-172 (EST. 7/91)

DEPARTMENT OF PESTICIDE REGULATION
PESTICIDE ENFORCEMENT BRANCH

		CERTIFICATION EXPIRATION DATE
PRIVATE APPLICATOR NAME		APPLICATOR PHONE NUMBER
ADDRESS		
CERTIFYING COUNTY NAME	PERMIT NUMBER ISSUED	COUNTY PHONE NUMBER
CERTIFICATION/PERMIT ISSUED BY:	TITLE	

CERTIFICATION ISSUED:

☐ GENERAL EXAMINATION ☐ WORKER SAFETY EXAMINATION

Who Needs It?

• A person defined as a private applicator who is applying for a restricted materials permit [California Code of Regulations § 6000.2(a)(1)(2)(3)].

Exemptions: Economic poison registrants and commercial carriers transporting restricted materials. Also, federally restricted materials listed under 6400(b) of the California Code of Regulations (CCR) when possessed or used by or under the supervision of a certified commercial applicator.

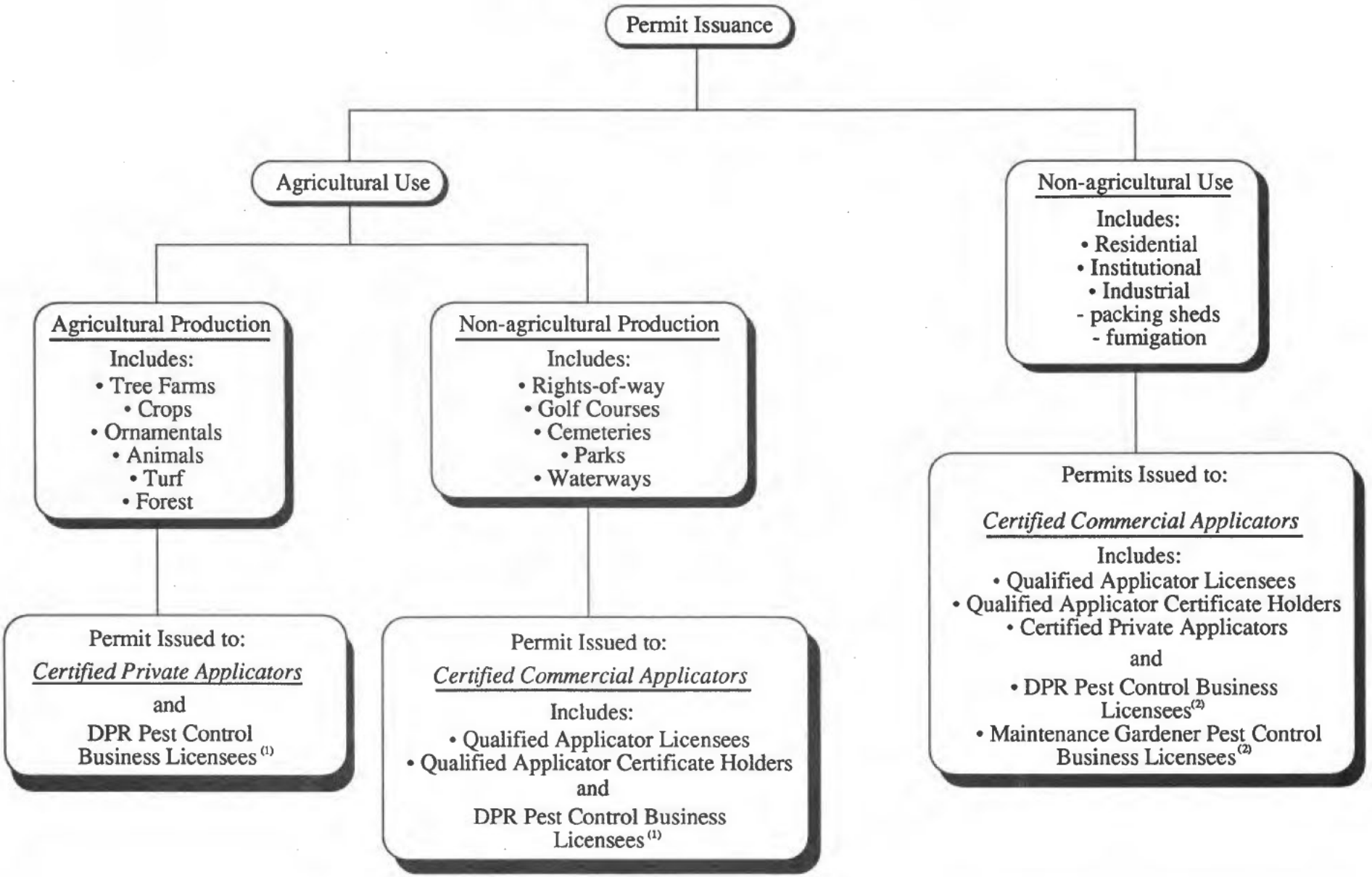
What's Required?

• Taking the Private Applicator Certification Examination and passing an oral evaluation conducted by the county agricultural commissioner to demonstrate knowledge of pest control and pest control laws and regulations.
• Knowledge of the Hazard Communication Program (Pesticide Safety Information Series).

Additional Requirements!

• Must purchase the agricultural use pesticides and/or restricted materials from a licensed pest control dealer (Food and Agricultural Code § 12971.5).
• Pesticide use reporting to the County Agricultural Commissioner (CAC), by the 10th day of the month following a pesticide application. (CCR § 6624).
• Obtaining an Operator Identification Number from the CAC (CCR § 6622). This number is also used for restricted materials permits issued by the CAC.
• Obtaining a Site Identification Number if using a pesticide in the production of an agricultural commodity from the CAC (CCR § 6623).
• When required by the commissioner, filing a Notice of Intent (NOI) with the county agricultural commissioner's office 24 hours prior to the application of the restricted material (CCR § 6434).
• Maintaining records concerning the pesticide application(s) for two years from the time of the application (CCR § 6624 and6778).
• Posting requirements concerning the application of the pesticide (i.e., reentry intervals, name of the pesticide) (CCR § 6776).
• A permit for possession and/or use of a restricted material, issued by the commissioner or under his/her direct supervision, or under permit of the director in counties where there is no commissioner (CCR § 6412).
• A ground water protection advisory (CCR § 6557) is required from a licensed adviser when pesticides under 6800(a) are applied in a Pesticide Management Zone (CCR § 6416).
• Maintaining employee training records on pesticide worker safety and Hazard Communications for two years (FAC § 6724).

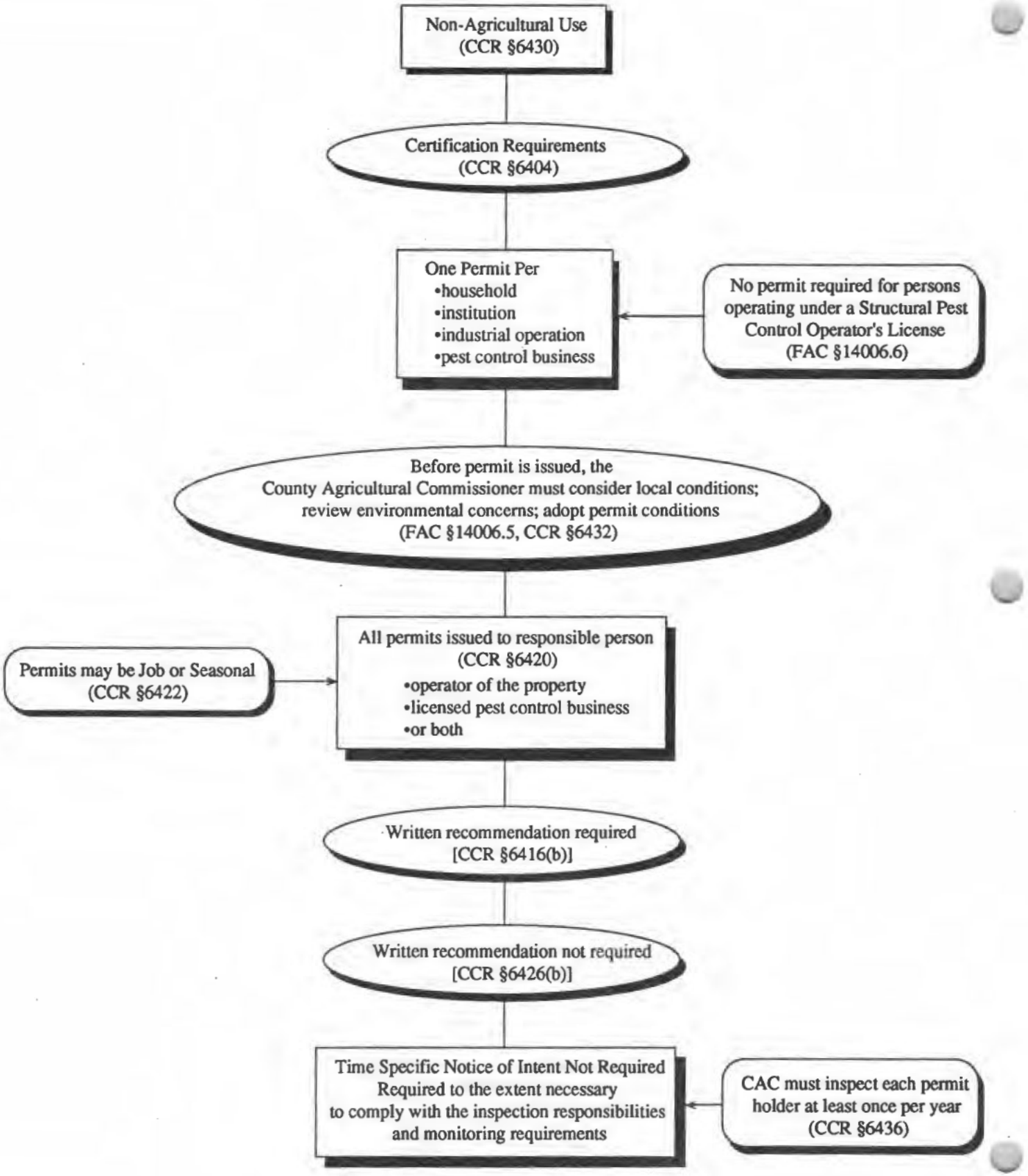
Restricted Materials Permit



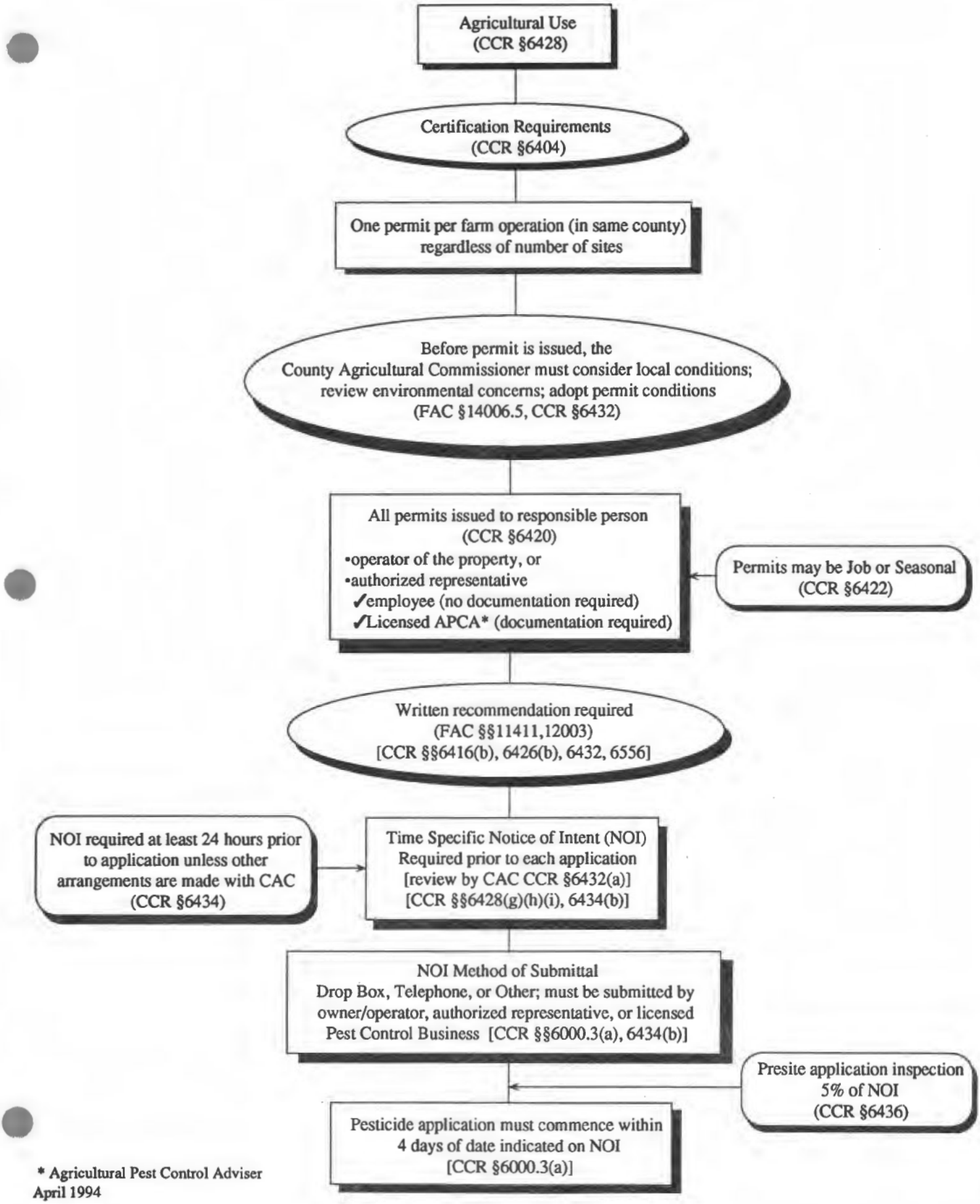
(1) May be issued a Restricted Materials Permit for possession only.
(2) May be issued a Restricted Materials Permit for possession and use.

April 1994

Restricted Materials Permit System



Restricted Materials Permit System


Agricultural Use
(CCR §6428)
Certification Requirements
(CCR §6404)
One permit per farm operation (in same county) regardless of number of sites
Before permit is issued, the
County Agricultural Commissioner must consider local conditions;
review environmental concerns; adopt permit conditions
(FAC §14006.5, CCR §6432)
All permits issued to responsible person
(CCR §6420)
•operator of the property, or
•authorized representative
✓employee (no documentation required)
✓Licensed APCA* (documentation required)
Permits may be Job or Seasonal
(CCR §6422)
Written recommendation required
(FAC §§11411,12003)
[CCR §§6416(b), 6426(b), 6432, 6556]
NOI required at least 24 hours prior to application unless other arrangements are made with CAC
(CCR §6434)
Time Specific Notice of Intent (NOI)
Required prior to each application
[review by CAC CCR §6432(a)]
[CCR §§6428(g)(h)(i), 6434(b)]
NOI Method of Submittal
Drop Box, Telephone, or Other; must be submitted by owner/operator, authorized representative, or licensed Pest Control Business [CCR §§6000.3(a), 6434(b)]
Presite application inspection
5% of NOI
(CCR §6436)
Pesticide application must commence within 4 days of date indicated on NOI
[CCR §6000.3(a)]

* Agricultural Pest Control Adviser

April 1994

Pesticide Safety Information Series A

Worker Health and Safety Branch

A1 SAFETY REQUIREMENTS FOR PESTICIDE HANDLERS

Legal Status of Labeling:
Federal and State laws require that pesticides be used according to the requirements on the label. However, in many cases the size of the label makes it difficult to include detailed instructions necessary to cover safety procedures for all circumstances and types of equipment.

Interpretation of Label Safety Precautions:
Interpret the safety precautions on the label as carefully as possible. For example, one would normally assume that the most hazardous conditions might occur in confined spaces indoors. However, equally hazardous conditions may occur in open areas if there is no wind.

Engineering controls, such as closed systems and enclosed cabs on the application equipment, are always preferred over the use of personal protective equipment (respirator, rainsuit, etc.). Check the pesticide label and California regulations to determine the appropriate engineering controls and protective equipment to use.

Handling pesticide concentrates manually presents the greatest hazard to the people involved. After a pesticide is mixed and loaded into the application equipment to be applied as a dilute liquid spray, the hazards decrease a little. The applicator should always try to avoid getting wet with the spray.

Safety Precautions to Follow:
When handling pesticides in California, eye protection is required for most activities. Some exemptions exist for injection or incorporation of pesticides in the soil, having spray booms below and behind the driver, working in an enclosed cab or vehicle and applying pesticide baits or solid fumigants. Protective eyewear can be a face shield or goggles, or if not specified by the label you may also wear safety glasses with front, brow and temple protection.

Exposure of the hands contributes significantly to the overall hazard of handling pesticides. California law requires that employees involved in the mixing and loading of pesticides, pesticide equipment cleaning or repair and hand (including hand-held equipment) application of pesticides be provided with and use gloves. The gloves provided each day must have been cleaned inside and out or must be new. If the type of glove needed is not on the label, you must use gloves made of rubber, neoprene or other chemical-resistant material. If the label specifically states that the handler should not use gloves, they must not be worn.

Respiratory protection is needed when handling pesticides that are toxic volatile liquids, dusts, powders, or fumigants. Respiratory protection is also required for most handling activities involving pesticides on the Minimal Exposure Pesticide list (some exemptions exist). The California Code of Regulations Title 3, section 6790-6793 explains the exemptions in detail. The type of respiratory protection required will be on the pesticide label. Employers must have a written procedure for selecting, fitting, cleaning, sanitizing and maintaining respiratory equipment. See PSIS A-5 for additional information on respiratory protection.

A closed system is required to be used by all employees handling liquid pesticides or liquid mixes made from dry pesticides with the signal word "DANGER" on the label, when the pesticide is used to produce an agricultural commodity.

Most pesticides can be absorbed into the skin. Thus, skin protection for workers is the most difficult problem associated with the application of pesticides. Employers are required to provide employees handling pesticides that have the signal words "DANGER" and "WARNING" with clean work clothing (long-sleeved shirt and long pants or coveralls) every day these pesticides are used. If the pesticide label or California regulations require the use of chemical resistant protection, the employer must provide clean chemical-resistant clothing that covers the body, feet and head. Due to the high temperatures that often exist in California, heat stress from use of chemical resistant clothing may be a greater hazard than pesticide exposure. In the absence of engineering controls, such as air-conditioned cabs, applications should be made at night or during the cooler portions of the day when protective equipment can be tolerated. Employees required to use waterproof or impervious raintsuits or pants and coat must not work in temperatures above 80°F in daylight hours or above 85° during nighttime hours. Some exemptions from the chemical resistant clothing requirements exist for handlers using a closed system, working in enclosed cabs or flagging from enclosed vehicles.

California regulations require employees to be adequately trained before they handle pesticides. Employers must have a written training program for employees who handle pesticides. The training should include: (1) information on the immediate and long-term hazards of the pesticides to be used, (2) safety procedures to be followed, (3) procedures for handling emergency situations, (4) the importance of immediate decontamination upon exposure, (5) the symptoms of poisoning, (6) where to obtain emergency medical care, (7) applicable regulations, (8) Material Safety Data Sheets (MSDS), and Pesticide Safety Information Series (PSIS) leaflets, (9) label requirements, (10) the employee's rights, (11)the location of the hazard communication program, MSDS's, and PSIS leaflets.

The words "must" and "should" are not the same. The word "must" indicates the action is required and comes from California regulations or product labeling that has included the latest EPA requirements. Some product labels may not have been changed to include the latest EPA safe handling requirements. The word "should" is a recommendation for additional safe handling to reduce exposure.

Pesticide Safety Information Series A

Worker Health and Safety Branch

A-2 STORAGE, TRANSPORTATION AND DISPOSAL

Storage: All pesticides and emptied containers must be properly stored or under personal control at all times. This means a responsible person must be present in the vicinity to maintain authority over the pesticides and containers, and to prevent contact by unauthorized persons. If these pesticides are adjacent to roadways or populated areas, the responsible person must have the pesticide(s) in sight.

Acceptable storage includes: (1) a locked enclosure with the fence not less than six feet high, (2) a lockable storage compartment, or (3) a locked truck or trailer with side racks, the tops of which are a minimum of six feet above the ground.

Pesticides should be kept in their original containers; they must never be put in containers which are commonly used for food, drink, or household products. This simple precaution will drastically reduce the number of accidental pesticide poisonings, especially those involving children.

All storage areas should be clean, dry, ventilated and well-lighted during use. Storage areas which contain pesticides with the signal words "DANGER" OR "WARNING" on the label must have warning signs posted at all probable directions of approach. These signs must state, "DANGER POISON STORAGE AREA," or some other similar language, and be readable from a distance of 25 feet.

Users should read and must comply with the storage requirements on the label. If pesticides are stored with fertilizers, they should be kept separated since they might react chemically and could result in a fire. There is also the possibility of crop damage or residues on marketed produce. Pesticides should not be stored near food, feed or personal protective equipment because of the possibility of contamination.

It is also good policy to keep an inventory of pesticides in storage.

Storage of pesticide waste products such as old materials or unrinsed containers awaiting recycling or disposal may require a hazardous waste facility permit. One should contact the California Environmental Protection Agency (Cal-EPA), Department of Toxic Substances Control for specific requirements.

Transportation: There are some simple procedures which can be followed to ensure that pesticides are transported in a safe manner. Pesticides must not be transported in the same compartment with a person, food, or feed. All pesticides should be transported in a secure upright position, the opening should be closed to prevent spillage, and all containers must have some form of labeling attached. This labeling must be either the original product labeling or service container labeling. Service container labeling requires the name and address of the person responsible for the container, the common name of the pesticide and the signal word from the original label. Pesticides must be properly locked, as mentioned above, when unattended.

As a general rule when transporting more pesticides than will be used in a few days' work, one should consult the California Highway Patrol Motor Carrier Safety Unit about compliance with U. S. Department

of Transportation (DOT) regulations dealing with the transportation of hazardous materials.

Rinsing: All containers which have held less than 28 gallons, unless returned to the registrant with prior permission, must be rinsed at the time of use unless used undiluted. The user must pour the rinse solution into the mix tank.

Disposal: All empty pesticide containers must be disposed of in a manner approved by the Cal-EPA, Department of Health Services in consultation with other departments within Cal-EPA. Glass, plastic, or metal containers must be taken to an approved disposal site. DO NOT BURY ANY PESTICIDE CONTAINER, except when placed in an approved disposal site.

Finally, users should contact the local Agricultural Commissioner who will be familiar with all local requirements. In many counties, a permit or certificate issued by the Commissioner is required before rinsed containers can be disposed.

The words "must" and "should" as used in the text are **not** the same. The word "must" means the action is required and comes from California regulations or product labeling that has included the latest E.P.A. requirements. The word "should" is a recommendation for additional safe handling practices to further reduce exposure.

Pesticide Safety Information Series A
Worker Health and Safety Branch

A3 CLOSED SYSTEMS

General Information: Hand-pouring has been found to be the most hazardous activity involving the handling of highly toxic pesticides, and has resulted in many serious human illnesses. It is important that each employee who will use a closed system be provided this information in a language the employee understands.

Proper use of a closed system reduces the potential for human exposure. On the other hand, if the system is not properly operated, cleaned and maintained, it can be a cause of excess exposure.

California's pesticide worker safety regulations require that employees, who handle liquid pesticides or liquid mixes or dilutions of pesticides displaying the signal word "DANGER" on the label, use a closed system. In addition, all minimal exposure pesticides must be handled through closed systems. The closed system requirement applies to all employees who use these pesticides for the production of an agricultural commodity. There is an exemption that allows employees to handle up to 1 gallon of pesticide product per day in original containers of up to 1 gallon in size without using a closed system.

"Closed system" is defined as a procedure for removing a pesticide from its original container, rinsing the emptied container, and transferring the pesticide and rinse solution through connecting hoses, pipes and couplings that are sufficiently tight to prevent exposure of any person to the pesticide or rinse solution. Rinsing is not required when the pesticide is used without dilution, the container is a returnable or reusable container that will be sent back to the registrant or the container is larger than 60 gallons.

California's Closed System Criteria: To meet California's requirements, a closed system should preclude closed systems utilizing procedures other than those outlined. Questions concerning the ability of other procedures to meet the closed system requirement should be addressed to the Department of Pesticide Regulation.

1. The liquid pesticide must be removed from its original shipping container and transferred through connecting hoses, pipes and/or couplings that are sufficiently tight to prevent exposure of any person to the pesticide concentrate, use dilution, or rinse solution.

2. All hoses, piping, tanks and connections used in conjunction with a closed system must be of a type appropriate for the pesticide being used and the pressure and vacuum of the system.

3. All sight gauges must be protected against breakage. Sight gauges must be equipped with valves so that the pipes to the sight gauge can be shut off in case of breakage or leakage.

4. The closed system must adequately measure the pesticide being used. Measuring devices must be accurately calibrated to the smallest unit in which the material is being weighed or measured. Pesticide remaining in the transfer lines may affect the accuracy the of measurement and must be considered.

5. The movement of a pesticide concentrate, beyond a pump by positive pressure, must not exceed 25 pounds per square inch (psi) of pressure.

6. A probe must not be removed from a container except when:

a. The container is emptied and the inside as well as the probe have been rinsed in accordance with Item 8.
b. The Department of Pesticide Regulation has evaluated the probe and determined that, by the nature of its construction or design, it eliminates significant risk of worker exposure to the pesticide when withdrawn from a partial container.
c. The pesticide is used without dilution and the container has been emptied.

7. Shut-off devices must be installed on the exit end of all hoses and at all disconnect points to prevent the pesticide from leaking when the transfer is stopped and the hose is removed or disconnected.

   a. If the hose carried pesticide concentrate and has not been rinsed in accordance with Item 8, a dry break coupler that will minimize pesticide loss to not more than 2 milliliters per disconnect must be installed at the disconnect point.
   b. If the hose carried a pesticide use dilution or rinse solution, a reversing action pump or a similar system that will empty the hose and eliminate loss of liquid from the end of the hose may be used as an alternative to a shut-off device.

8. When the pesticide is to be diluted for use, the closed system must provide for adequate rinsing of containers that have held less than 60 gallons of a liquid pesticide. Rinsing must be done with a medium, such as water, that contains no pesticide.

   a. The rinsing system must be capable of spray-rinsing the inner surfaces of the container, and the rinse solution must go into the pesticide mix tank or applicator vehicle via the closed system. The system must be capable of adequately rinsing the probe (if used) and all hoses, measuring devices, etc.
   b. A minimum of 15 psi of pressure must be used for rinsing.
   c. The rinsing must be continued until a minimum of 10 gallons or one- half of the container volume, whichever is less, of rinse medium has been used.
   d. The rinse solution must be removed from the pesticide container concurrent with introduction of the rinse medium.
   e. Pesticide containers must be protected against excessive pressure during the container rinse operation. The maximum container pressure must not exceed 5 psi.

9. The system must be cleaned and maintained according to the manufacturer's instructions. If the system is not a commercially produced system it must be maintained on a regular basis. A record of cleaning and maintenance must be maintained.

10. All label-required protective equipment must be present at the work site. Eye protection and gloves must be worn even while using a closed system. Requirements for employer-provided work clothing must also be met. If pesticides requiring full-body chemical resistant protection are used through a closed system, a chemical resistant apron and chemical resistant boots may be used in lieu of the full-body chemical resistant protection.

11. Each commercially produced closed system or component to be used with a closed system must be sold with: (a) complete instructions consisting of a functional operating manual and a decal(s) covering the basic operation; the decal(s) must be placed in a prominent location on the system; (b) specific directions for cleaning and maintenance of the system on a scheduled basis; and (c) information on any restrictions or limitations relating to the system, such as pesticides that are incompatible with materials used in the construction of the system, types (or sizes) of containers or closures that cannot be handled by the system, any limits on ability to correct for over measurement of a pesticide, or special procedures or limitations on the ability of the system to deal with partial containers.

A list of closed systems which have been evaluated and found to meet these criteria is available from the California Environmental Protection Agency, Department of Pesticide Regulation.

Pesticide Safety Information Series A

Worker Health and Safety Branch

A4 FIRST AID AND DECONTAMINATION

This leaflet is for use in the training of employees who handle pesticides. The information is of a general nature and should supplement first aid statements found on pesticide labels.

PEOPLE WHO BECOME ILL OR SUFFER DIRECT EXPOSURE WHILE WORKING WITH PESTICIDES. Any person working with pesticides who becomes ill or are directly exposed should stop work immediately. Notify the supervisor or a fellow employee of the situation, and take necessary measures to eliminate any source of continued pesticide exposure. The exposed person should go to a source of fresh air, remove work clothing, shower completely, including washing the hair, and change into clean clothing. If shower facilities are not immediately available, exposed persons should remove all contaminated clothing immediately and use the closest available water source to clean the body. This may be water from a faucet or hose, a jug or irrigation water from a canal or ditch. In all cases, the instructions should be: DON'T WAIT - DECONTAMINATE IMMEDIATELY. **Take** the person to the nearest emergency medical care facility. Do not leave anyone alone or allow them to drive once illness symptoms develop.

If a person collapses while working with pesticides, remove that person from the pesticide use area immediately and give the necessary resuscitation. (Workers should remember that a sudden collapse may be due to a heart attack or other medical emergency not related to pesticide exposure. It is highly desirable to train all workers in cardiopulmonary resuscitation (CPR). The American Red Cross and the American Heart Association teach CPR. Contact the local chapter of either of these organizations to make arrangements for training individuals or groups. Remove contaminated clothing and wash contaminated skin with soap and water. Use any readily available source of water as discussed above. Once the victim is breathing on his own and not in immediate distress, take him to the nearest emergency medical care facility. Rescuers should be careful not to contaminate themselves while caring for a victim with pesticides on the skin and/or clothing.

Take the following steps when caring for individuals who become ill while working with pesticides: (1) Stop exposure; (2) resuscitate (if necessary) and decontaminate and (3) immediately take to the nearest emergency medical care facility.

It is very helpful and important to supply the physician or emergency room personnel with as much information as possible regarding the circumstances under which an illness began. Provide the physician with the name of the pesticide the victim was exposed to or was handling. If possible, take a clean copy of the product label(s) to the physician with the victim. If a label cannot be taken in with the victim, write down the exact name of the product, EPA registration number and active ingredients, if possible, and give it to the physician. As a last resort, take a clean, empty, labeled container or a sealed, labeled container to the physician along with the victim. (Exposure of emergency care or hospital personnel can occur if a container with pesticides is dropped and broken.)

SUDDEN CONTAMINATION WITH PESTICIDES. Pesticide chemicals can be absorbed into the body by: (1) Breathing in

dust or vapors; (2) skin or eye contact and (3) swallowing.

Absorption of some chemicals is very rapid, while absorption of others is slower. It is important to remove any pesticide that comes into contact with the body. It is also important to immediately remove any concentrated material or direct spills of such chemicals from the body. Workers should be informed of the following procedures:

1. Breathing Dust or Vapors. In the event of a sudden, unexpected release of pesticide dust or vapors into the air, leave the area immediately. If in an open area, go upwind at least 100 feet away from the dust or vapor. If indoors or in a confined area, leave the area immediately and go outdoors or to a well-ventilated area away from the dust or vapors. If you find someone else overcome by dust or vapors, immediately move him to an area away from the pesticides, and proceed as described for persons who suffer from sudden collapse while working with pesticides.

2. Pesticides In the Eyes. If pesticides get into the eyes, immediately rinse them with water. It is best to hold the eyelids open and slowly pour water over the eyes. Never use a forceful stream of water directed into the eye as damage may occur. Water flowing slowly and gently from a faucet or hose should be used. Rinsing the eye should continue for at least 15 minutes. If symptoms of pain, discomfort, or visual problems are present after thoroughly rinsing the eyes, immediately take the affected person to the nearest emergency medical care facility.

3. Pesticides Spilled On the Clothing or Skin. If pesticides are spilled on the clothing or skin, immediately remove all contaminated clothing. Wash all exposed skin areas with soap and water. If available, a complete shower (including hair wash) is recommended. Use any available uncontaminated water source as discussed earlier. DO NOT WAIT -- DECONTAMINATE! Do not reuse contaminated clothing until it has been properly washed. Many pesticides can eventually penetrate protective clothing even if it is waterproof. It is therefore important to remove protective clothing immediately if it becomes contaminated, and replace it with clean clothing. If illness symptoms occur after pesticides have been spilled onto the clothing or skin, immediately take the affected person to the nearest emergency medical care facility.

4. Pesticides Are Swallowed. In the event a pesticide is swallowed, the victim should drink sips of water or milk. Call 911, a physician or the nearest poison control center for further advice. Do **NOT** give fluids to an unconscious or semi-alert person. Do not induce vomiting in an unconscious or semi-alert person. Such individuals should be taken immediately to the nearest emergency medical care facility.

For adults, induce vomiting by administering one ounce of syrup of ipecac, if it is immediately available. For children, proportionately reduce the dose of ipecac syrup (two to four teaspoonfuls). After giving syrup of ipecac, vomiting is usually delayed by 15 to 30 minutes.

Check the pesticide label. Some pesticide labels will tell you **not** to make the person vomit. Making a person vomit after swallowing caustic chemicals may make the condition worse.

Do **NOT** administer salt water or mustard solutions to induce vomiting as may be recommended on some outdated labels. Salt and mustard solutions have been shown to be dangerous to use for this purpose.

REMEMBER: It is important to supply the physician or emergency room personnel with as much information as possible regarding the circumstances under which the victim became ill. Supply a copy of the product label or labels to the physician when taking a victim in for evaluation. At least be able to supply the name of the pesticide(s) involved.

Additional Useful Information. Post the following information near all work telephones:

-Telephone number of the nearest emergency medical care facility.

-Address and physical location of the emergency facility.

-Telephone number of ambulance services in the area.

-Telephone number of the regional poison control center serving the area.

Many areas are served by regional poison control centers. In the event of a worker poisoning incident, immediate contact with the regional poison control center will provide professional guidance on how to proceed with first aid and resuscitation measures. Give the center as much information as possible regarding what took place and the identity of the pesticides involved. If a victim is being transported to an emergency care facility, advance notification to the facility by telephone will allow for preparation for the potential emergency care of the victim.

California Poison Control Centers

FRESNO

[redacted]
Valley Children's Hospital
3151 N. Millbrook
P.O. Box IN31
Fresno, CA 93703

LOS ANGELES

Public
[redacted]

Physicians only
[redacted]
Los Angeles County USC Medical Center
1200 N. State St.
Room 1107
Los Angeles, CA 90033

SACRAMENTO

[redacted]
University of Calif., Davis Medical Center
2315 Stockton Blvd.
Sacramento, CA 95817-2282

SAN JOSE

[redacted]
Santa Clara Valley Medical Center
750 S. Bascom Ave.
San Jose, CA 95128

SAN DIEGO

[redacted]
University of California San Diego Medical Center
300 W. Arbor Dr.
San Diego, CA 92103

SAN FRANCISCO

[redacted]
San Francisco Bay Area Poison Center
San Francisco Hospital
1001 Potrero
Room 1E-6
San Francisco, CA 94110

Pesticide Safety Information Series A

Worker Health and Safety Branch

A5 RESPIRATORY PROTECTION

General Information: The purpose of this leaflet is to provide pesticide users with basic information on respiratory protection and how to comply with California Environmental Protection Agency, Department of Pesticide Regulation (DPR) respiratory protection regulations (California Code of Regulations 6738). Adoption of the content of this Safety Information Series leaflet will meet the minimum requirements of an employer's written respiratory protection program. Personal respiratory protection is necessary to mitigate airborne inhalation hazards associated with the use of certain pesticide products. If using such a product, DPR regulations require the employer to adopt a written respiratory protection program that covers the selection, care and use of respirators at the worksite.

Conditions Requiring Respiratory Protection: A general goal of occupational health and safety is the protection of workers from excessive exposure to harmful airborne dusts, fogs, mists, gases, smokes, sprays, or vapors. These airborne hazards are controlled best by engineering methods such as enclosure or confinement of the process generating the hazard, general or local ventilation to keep the airborne concentration below accepted levels, or substitution of less toxic materials. The nature of the use of many pesticide products creates a working environment that is not readily controlled by means other than personal protective equipment. Personal respiratory protection is necessary when hazardous airborne concentrations of pesticides are not controlled by other means, or where emergency protection against occasional or relatively brief exposure is needed. The pesticide product label is the principle source of information on whether typical label-directed use of the specific product will generate a working atmosphere that presents an inhalation hazard. Federal and state law requires pesticide product labels to contain information on the composition, the instructions for application, and the environmental and health and safety precautions for the specific formulation in that container. The label should include recommendations for any necessary respiratory protection. Respiratory protection may also be necessary when applying products with labels that recommend "avoid spray" if workers are subject to mist or spray.

If personal respiratory protection is required, the employer must provide and the employee must use approved respiratory equipment. Approved respiratory equipment is defined as equipment approved for that particular exposure by the National Institute for Occupational Safety and Health (NIOSH) or the Mine Safety and Health Administration (MSHA).

Training: Each employee must be trained initially and annually in the need, use, sanitary care and limitations of the respiratory equipment he or she may have to use. In addition to the areas covered in this leaflet, this training must be incorporated into the general safety training required for all employees who handle pesticides.

Selection and Fitting of Respirators: Selection of the proper respirator for a given exposure is critical. If the pesticide to which the worker is exposed is an irritant to the eyes, nose or throat, a full-face respirator should be worn to also protect

the eyes. For air-purifying respirators, the air-purifying element (filter or cartridge) must be approved by NIOSH/MSHA for use against the specific hazard. Pesticide product labels are the primary source of information on the type of respiratory protection necessary for using the product. With this information, a safety equipment supplier will be able to provide the correct respiratory equipment. For additional help in the selection process, consult one of the sources listed below.

Every respirator wearer must be instructed in how to properly fit and test the respiratory equipment they use. Each wearer should be allowed to wear respiratory equipment in normal, uncontaminated air for an adequate familiarity period, and to wear it in a test atmosphere such as that generated by smoke tubes or isoamyl acetate (banana oil).

Maintenance and Sanitation: The employer is responsible for repair or replacement of respiratory equipment as necessary due to wear and deterioration. Routinely used respirators should be regularly cleaned, inspected and sanitized by a trained person. Regular cleaning and inspection prolongs the useful life and assures the wearer that the respirator is working as efficiently as possible. For personal hygiene and communicable disease considerations, respirators must not be passed from one individual to another without being cleaned and sanitized. This situation can be avoided by assigning a respirator to each wearer.

When not in use, respirators must be stored to preclude conditions which deform the facepiece and to protect from excessive exposure to dust, sunlight, extreme temperatures, excessive moisture or damaging chemicals. Any or all of the above will severely limit the useful life of the respirator. Plastic containers with lids can provide storage for respirators.

Respirators maintained for emergency use, such as canister gas masks and self- contained breathing apparatus (SCBA), must be inspected prior to use or at least monthly (if not used within a one month period) to assure reliable operation when and if needed. All respirators should be inspected before each use to ensure cleanliness and that all components are present and operable.

Medical Evaluation: Breathing through a respirator may require more effort than normal breathing. For some individuals, this effort is difficult due to various reasons. If an employer requires an employee to wear a respirator, DPR regulations require that the wearer must be informed of certain medical limitations that may interfere. If the employee has such a condition, an exam by a physician must be done to determine if the worker is physically able to perform the work while using the required respiratory equipment. The physician should determine what health and physical conditions are pertinent. The employer must follow the physician's written recommendation concerning the employee's capability to wear respiratory equipment. Written evidence that the employee was informed must be on file. A record of the physician's evaluation must be on file for each employee who indicates a possible medical limitation before that employee is required to perform any work that requires respiratory protection.

Limitations: Respirators do have limitations. They cannot adequately protect a worker from all contaminants under all conditions. In general, the typical half-face air-purifying respirator can be used for protection up 10 times a Permissible Exposure Level (PEL). For example, if the PEL of a certain material is 10 parts per million (ppm) in air, a properly fitted respirator with the proper cartridges would adequately protect a wearer in concentrations up to 100 ppm. He would <u>not</u> receive adequate protection in concentrations above 100 ppm. The cartridges or canisters of air-purifying respirators have a limited capacity to protect against toxic gases and vapors in the air. Theoretically, cartridges and canisters are effective against toxic vapors and gases until their capacity is exhausted; then the vapor or gas

passes through the cartridge or canister and into the inside of the respirator. If the wearer detects an odor or taste, or feels eye or throat irritation, he should leave the hazardous area immediately and go to a safe area that contains uncontaminated air. The cartridge or canister on the respirator must be changed. Because of the limited useful service life of canisters and cartridges and because certain pesticides lack warning properties, DPR regulations require that air- purifying elements be replaced daily unless there is some other method of establishing the useful lifetime of the element.

Air purifying respirators (canister or cartridge) do not provide oxygen for the wearer. They should not be used in situations where the oxygen content of the air is suspect. In these situations, equipment capable of providing an independent source of breathing quality air, such as a self-contained breathing apparatus (SCBA) or an air-line respirator, should be utilized.

Employees with facial hair cannot work where respiratory protection is required unless provided with a respiratory that does not require a face-to-facepiece seal for proper operation.

Respirators only protect from inhalation exposure. For many situations when pesticides are used, protection from dermal exposure also may be necessary.

Information Sources: Additional information can be obtained from several organizations and individuals. Some sources are listed below for your use:

1. Safety equipment retailers - see local telephone directory yellow pages.

2. Department of Pesticide Regulation, Worker Health and Safety Branch, 1220 N Street, Sacramento, California 94271-0001, (916) [redacted]

3. Cal/OSHA Consultation Service - see listing under State Government Offices, Industrial Relations Department, in local telephone directory.

4. County Agricultural Commissioner

5. County Health Department

6. Occupational safety and health consultants

7. Insurance carrier

The words "must" and "should" are **not** the same. The word "must" means the action is required and comes from California regulations or product labeling that has included the latest federal-EPA requirements. The word "should" is a recommendation for additional safe handling to reduce exposure.

SAMPLE

WRITTEN SITE SPECIFIC OPERATING PROCEDURES FOR THE SELECTION AND USE OF RESPIRATORS

RESPIRATORY PROTECTION PROGRAM

Company Name_____

Address_____

_____

Person Responsible for Program_____

I. Selection of Respirators

We have the following pesticide related uses where respirators are used.

_____

_____

Our selection of respirators is based on:

_____

Personnel and selected respirator(s)

Employee	Respirator
_____	_____
_____	_____
_____	_____

Additionally, we have an area(s) or times where emergency respiratory protection is necessary.

_____

For this use, we have selected the following respirator(s).

_____

II. Use of Respirators

The above employees have received respiratory protection training. This training was conducted initially by _____ on _____. Attached is a list of more recent training.

A routine inspection of respiratory gear is made by _____ on a periodic basis. Equipment kept for emergency use is to be inspected at least monthly. A record of the most recent inspection must be kept on the respirator or its storage container.

EMPLOYEE STATEMENT OF MEDICAL CONDITION

_____

(Print Employee Name)

In accordance of Section 6738 of the California Code of Regulations, to the best of my knowledge, I have (_), have no (_) medical conditions which would interfere with wearing a respirator while engaged in hazardous exposure situations. I understand that heart disease, high blood pressure, lung disease or presence of a perforated ear drum require specific medical evaluation by a physician before safe use of a respirator can be determined.

_____ _____

(Signature of Employee) (Date)

REPORT OF MEDICAL EVALUATION

In accordance with Section 6738 of the California Code of Regulations, the employee listed above has been given an examination by me and at this time there is no medical contraindication to the employee named above wearing a respirator to allow working in hazardous exposure environments.

Other Comments:_____

_____

_____

_____

(Printed Physician's Name)

_____ _____

(Physician's Signature) (Date)

Pesticide Safety Information Series A
Worker Health and Safety Branch

A-6 SUMMARY OF WORKER SAFETY REGULATIONS

The purpose of the pesticide worker safety regulations is to specify safe work practices for employees who handle (mix, load, apply, flag for aerial application or service contaminated equipment) pesticides or enter treated fields. Employers must ensure that their employees work safely and follow all safety rules, including requirements shown on the label. Pesticide mixing, loading and application equipment used by employees must be safe to use and is subject to inspection at any time. If a worksite is suspected of being dangerous, the Department of Pesticide Regulation or the local Agricultural Commissioner may prohibit entry of employees or place special restrictions on entry to protect employees. Important requirements of the regulations follow.

Hazard Communication (CCR 6723 and 6761). Hazard communication is designed to ensure that employees are aware of the hazards they face and what they should do to protect themselves from those hazards. For pesticide handlers the three principle provisions of the program are: (1) labels and other warnings; (2) training and (3) exposure records and monitoring. For field workers, general hazard information is provided on Crop Sheets that must be available to the worker. Pesticide Safety Information Series (PSIS) leaflet A-9, which tells the worker where the use records can be found, must also be available to the worker. Employers must have Material Safety Data Sheets (MSDS) and PSIS leaflets, if available, for the pesticides used.

Labels and Other Warnings (CCR 6602, 6618, 6674, 6678 and 6776). Pesticide labels must be available at the worksite. If pesticides are transferred from their original container the new container must be labeled with the identity of the pesticide, the signal word from the product label and the name of the person or firm responsible (except for limited on-farm use by the farmer).

The employer is responsible for warning employees about areas that have been treated and enforcing reentry restrictions. Oral warnings must be given to all employees who might enter when there is a reentry interval in effect. Warning signs must also be posted by the operator of the property for the duration of any reentry interval of more than seven days and for certain crops and conditions when the application of a pesticide with the signal word "DANGER" on the label results in a reentry interval of two days or more. Warnings are also required around pesticide storage areas and when pesticides are applied in irrigation water.

Training (CCR 6724, 6764 and 6770). Employees who handle pesticides must be given adequate training in the use of the pesticides. This training must be given before the employee begins to handle pesticides. They also must be given refresher training each year. Each employee must fully understand the immediate and long term hazards of use and know the procedures they must follow to safely work with the pesticides they will be using, even during emergency or non-routine situations.

Training must include the use of protective clothing and safety equipment, the common symptoms of poisoning, where to get emergency medical care, the provisions of medical supervision, regulations and label requirements, and the need for immediate decontamination of the skin and eyes when exposure occurs. The training must also cover the information contained in applicable PSIS leaflets and the

appropriate MSDS as well as where these documents are located. There are additional special training requirements for employees who must use respiratory protection. Employees must be informed that they have the right to receive information (or it can be given to their physician) about pesticides to which they may be exposed. Employees cannot be fired for exercising their rights.

Records of each employee's training must be kept at the employee's work headquarters. Both the employer and the employee must sign the training record to acknowledge its accuracy.

The onsite field work crew leader must be trained about reentry and posting and how to handle any illness or injury that may occur in the field. The employer must train employees about where specific hazard and use information is kept. Early entry field workers are required to be trained about specific pesticides used and the protective clothing and hygiene procedures they should follow to prevent exposure.

Emergency Medical Care (CCR 6726 and 6766). The employer must make prior arrangements for emergency medical care, and tell employees where they should be taken if they get sick or injured on the job. For employees who handle pesticides, the name, address and telephone number of the physician, clinic or emergency room able to provide care must be posted in a prominent place at the work site, or on the work vehicle if there is no fixed work site. Emergency medical care must also be planned in advance for employees who work in fields after a pesticide application. At least the field work crew supervisor must know what to do if someone gets sick or is injured on the job.

Engineering Controls (CCR 6742, 6746 and 6793). All tanks on pesticide equipment used by employees must have covers to prevent spillage when in use. If the tank is 50 gallons or larger and used for pesticides with the signal word "DANGER" or "WARNING" there must be an automatic fill shut-off or an external sight gauge to help prevent over filling.

Closed Systems (CCR 6746). Closed systems must be used by all employees who mix and load liquid pesticide products or liquid mixes of dry pesticide products with the signal word "DANGER" or any minimal exposure pesticide used for the production of an agricultural commodity. When pesticides with the signal word "DANGER" or "WARNING" are handled by employees, the loading hose must have a shut-off device on the end to prevent spills when removed from the application vehicle tank. Closed systems are fully explained in PSIS A-3.

Cleaning/Repairing Equipment (CCR 6744). Employees who clean or repair pesticide handling equipment must be fully informed of and protected from the hazards of working on that equipment.

Protective Equipment (CCR 6738 and 6793). Employers are required to provide all necessary protective clothing and equipment and see that it is cleaned and repaired. Generally, the label of the pesticide used will say what is needed. However, there are additional requirements that may not appear on labels.

Eye protection - Eye protection is required when handling pesticides, except when injecting or incorporating pesticides into the soil, applying dry baits, working in an enclosed cab or operating equipment with the nozzles located below the employee and pointed downward.

Gloves - Gloves must be used for all mixing and loading, for adjusting, cleaning or repairing contaminated equipment and for all hand application activities (except vertebrate pest control using long-handled tools). Gloves must be replaced or washed every day. It is especially important that gloves be washed on the inside as well as the outside, since residue can accumulate inside.

Respiratory Equipment. When respiratory protection is required the employer must adopt written procedures for selecting, fitting and maintaining the equipment. Employees with certain medical conditions, such as heart or respiratory disease, must be evaluated by a physician before being assigned to

this kind of work. Respiratory protection is explained in PSIS A-5.

Full-Body Chemical Resistant Clothing. Some pesticides with unusual hazards require full body chemical resistant clothing. Heat stress may occur if this kind of clothing is used in warm temperatures. Since the hazards of the pesticide will not allow its use without this kind of protection, the following rule applies: Employees are prohibited from using pesticides with this clothing requirement when the temperature is above 80°F during the day or 85°F at night unless they are provided with cooled chemical suits or use closed systems and work in enclosed cabs.

Hygiene (CCR 6732, 6734 and 6793). Clean water, soap and towels must be available at the work site where employees mix or load pesticides with the signal word "DANGER" or "WARNING" or pesticides listed as minimal exposure pesticides.

Employees must be provided a place to wash and change clothing after work if their exposure to pesticides that carry the signal word "DANGER" or "WARNING" exceeds 6 days in a 30 day period. A change area is also required if employees handle minimal exposure pesticides. Employees handling only antimicrobial agents, are exempt from the change area requirements.

Work Clothes (CCR 6736 and 6793). Employees must be provided clean work clothes if they handle pesticides with the signal word "DANGER" or "WARNING" or any minimal exposure pesticide. Work clothes can be either coveralls or a shirt and trousers, but must have long sleeves and long legs. The employer is responsible for the washing of work clothes and must inform the person washing the clothes that it may be contaminated with pesticides and should be washed separately. Washing of contaminated clothing is discussed in PSIS A-7. Employees handling only antimicrobial agents, are exempt from the work clothes requirements.

Use Records (CCR 6624, 6728 and 6778). Records about when and where pesticides were used must be kept for most pesticide use situations. The employer must have records of employee exposure to organophosphate and N-methyl carbamate pesticides used in the production of an agricultural commodity. These records must show for each person the name of the pesticide and the date of the exposure.

Medical Supervision (CCR 6728). Employees whose exposure to organophosphate and carbamate pesticides with the signal word "DANGER" or "WARNING" exceeds 6 days in a 30-day period, for the production of an agricultural commodity, must be provided with appropriate medical supervision that includes periodic cholinesterase blood tests. Medical supervision is explained in PSIS B-1.

Employee Contact (CCR 6730). An employee working alone with pesticides with the signal word "DANGER" for the production of an agricultural commodity must have contact with another person at least once every two hours during the day and once every hour at night.

Fumigants (CCR 6780, 6782 and 6784). Fumigants are pesticides which are used as a gas. A permissible exposure level (PEL) has been set for most fumigants. These PELs must not be exceeded. It is the employer's responsibility to know that employees are not being overexposed or to provide approved respiratory protection. Where fumigants are used, there must be an accident response plan that tells employees what to do in case of a spill, leak or fire. Employees must know what is in the plan.

Some fumigants cannot be detected in the air by odor, taste, irritation or sight. For these fumigants, the employer must know or anticipate possible exposure from routine work activities. This is done by monitoring the actual worksite or use of previous monitoring from similar procedures and situations. This will show that one of three situations exist: (1) Employee exposure does not exceed the PEL, in which case no respiratory protection is required during those times; (2) Employee exposure will exceed the PEL, in which case approved respiratory protection is required and (3) Employee exposure is variable (i.e., there are times when the levels exceed the PEL and times when it does not). In these cases approved respiratory protection must be worn at all of

these uncertain times unless there is continuous monitoring at the worksite. If there is continuous monitoring, respiratory equipment is necessary only when monitors indicate the PEL is exceeded.

Reentry Interval (CCR 6770, 6772, 6774). A reentry interval is the period of time, following a pesticide application, when employees are not allowed to go into the treated field for picking (hand-harvesting), thinning, weeding, tying, pruning, limb propping or similar work.

Reentry, for activities such as irrigating or operating tractors, is allowed if special protection is used to used to prevent employee exposure to residues. Reentry intervals for many pesticides have been established by regulation, others are stated on pesticide labels. Both must be observed. Some label reentry intervals will allow field work if the workers are wearing special work clothing and gloves. This condition applies only after any more restrictive intervals in regulation have expired.

Spray Is Dry, Dust is Settled (CCR 6770). No employee can enter a treated area before the pesticide spray has dried or dust has settled.

Minimal Exposure Pesticides (MEP) (CCR 6790-6793). The following pesticides are on the minimal exposure pesticide list: propargite (Omite®, Comite®), folpet, bromoxynil (Buctril®, Bromate®) and oxydemeton-methyl (Metasystox®-R). The hazards of using these pesticides require special safety rules regardless of the toxicity category of the pesticide. These rules are: (1) a change area must be provided; (2) washing facilities must be at all mix/load sites; (3) clean work clothing must be provided each day; (4) a closed system must be used for liquid pesticides or liquid dilutions of pesticides; (5) employees who handle MEPs must wear clean or new rain suit protection (except when using a closed system or sealed water soluble packaging, in enclosed cabs or vehicles, injecting or incorporating pesticides into the soil or using equipment with spray nozzles behind the applicator that are pointed down); and (6) respiratory protection must be used when applying by hand or ground (except when incorporating into the soil or using equipment with the nozzles behind the applicator and pointed down).

You may examine a complete set of these regulations at your County Agricultural Commissioner's office.

Pesticide Safety Information Series A

Worker Health and Safety Branch

A7 LAUNDERING PESTICIDE CONTAMINATED CLOTHING (NON-COMMERCIAL)

General Information: This leaflet provides information to persons washing pesticide contaminated clothing with non-commercial laundry machines on the best way to remove the pesticide residues. If the information in this guideline is followed properly, it should minimize exposure of the person doing the laundry and their family to pesticide residues.

With minor exceptions, California pesticide worker safety regulations require that an employer must provide clean work clothing for each employee who handles pesticides (mixes, loads, applies, flags for an application and repairs or cleans pesticide-contaminated equipment) with the signal word "Warning" or "Danger". The work clothing can be either coveralls or a long-sleeved shirt and long-legged trousers. The employer must ensure that these employees wear clean work clothing at the start of each work day, change out of their clothing and wash at the end of the work day. The employer is responsible to make sure that the potentially contaminated work clothing is not taken home by employees. If an employee's work day does not involve return to the employer's headquarters, the contaminated work clothing must be removed and stored in a sealable container outside of their living quarters and returned to the employer. It is also the employer's responsibility to provide for the cleaning of work clothing, and to inform the person doing the laundry that the clothing may be contaminated with pesticides and should be laundered separately.

Clothing can become contaminated from exposure to pesticide residues. In situations when any pesticide contaminated clothing is to be cleaned with home laundry equipment, it should be done in a manner that would prevent exposure of family members to unwashed clothing or the rinse water. The following measures should be considered when washing pesticide contaminated clothing with non-commercial machines regardless of the pesticide's signal word (Danger, Warning or Caution):

Precautions and Personal Protection. Keep all contaminated clothing, including under-garments, in closed plastic bags outside the house where children and pets will not have access. Wash hands immediately after handling pesticide contaminated clothing.

Loading the Washer. Wash garments separately from family wash. Where feasible, use of separate washer and dryer is the preferred practice.

1. If possible, dump the contaminated clothing directly into the washer from the plastic bag without hand contact.

2. Keep the washing area well-ventilated.

Pre-rinse. Agitate and spin-out in automatic washer in order to dilute pesticide and increase removal.

Load Size. Place a light load of clothing into the washer to help ensure good agitation.

Water Level. Use FULL water level setting to help dilute any pesticide present.

Water Temperature. Use HOT water setting. Hot water has shown to increase pesticide removal.

Wash Cycle. Use LONGEST wash cycle.

Detergent. Use a HEAVY-DUTY liquid or powdered detergent as recommended on the package.

Water Hardness. Water hardness can deactivate detergent, and thus can affect pesticide removal. Use of mechanical water softeners is recommended in areas with high water hardness.

Additives. Neither bleach nor ammonia seems to affect removal of most pesticides. Never use both in conjunction, since a highly toxic gas can be formed by this combination.

Cleaning the Washing Machine. After laundering contaminated clothing, clean the washing machine by running it empty through a complete cycle, using hot water and detergent.

Drying. Line-drying is the preferred method. It will not only prevent contamination of the drying machine but sunlight may also help degrade any remaining pesticide residues. If a dryer is used, run it until the clothing is completely dry. After drying, run the empty dryer for about 10 minutes.

Tips for Reducing Pesticide Exposure Potential to Family Members:

- Remove contaminated clothing at the work-site.
- Empty pockets and cuffs at the work-site.
- Shower at the end of the work day. Use clean water and soap.
- If clothing had pesticide concentrate spill on it, take the clothing off immediately. Do not launder. Dispose of in accord with state and local laws.
- Inform the person doing the laundry at home (if other than pesticide handler) that the clothing is pesticide contaminated and how to launder it.

The words "must" and "should" used in the text are not the same. The word "must" indicates the action is required and comes from California regulations or the pesticide label that has included the latest EPA requirements. The word "should" is a recommendation for additional handling practices to further reduce exposure.

Additional Reading

1. Nelson, C., M. Rucker, W. Olson, D. Branson, A. Slocum and J. Stone. 1988. Farm families' attitudes and practices regarding pesticide application and protective clothing: a five-state comparison. Part 2: Launderer data. Clothing and Textiles Research Journal. 7:36-45.

2. Clifford, N.J. and A.S. Nies. 1989. Organophosphate poisoning from wearing a laundered uniform previously contaminated with parathion. JAMA. 262:3035-3036.

3. Easter, E. 1983. Removal of pesticide residues from fabrics by laundering. Textile Chemist and Colorist. 47:29-33.

4. Laughlin, J.M., C.B. Easley, R.E. Gold and D.R. Tupy. 1981. Methyl parathion transfer from contaminated fabrics to subsequent laundry and laundry equipment. Bull. Environm. Contam. Toxicol. 27:518-523.

Pesticide Safety Information Series A

Worker Health and Safety Branch

A-8 HAZARD COMMUNICATION INFORMATION FOR EMPLOYEES HANDLING PESTICIDES

WORKER RIGHTS. The law requires that you be told about potential hazards in the workplace and trained to deal with them. (1) You have the right to look at pesticide use records and Material Safety Data Sheets. (2) You have the right to file confidential complaints about unsafe work conditions without being punished or fired by your employer. (3) Whoever pays you must make plans for medical care and see that you are taken to the doctor if you get sick on the job. (4) If you get sick or injured on the job you have the right to file a claim for worker's compensation. Your employer will explain your rights to you. If you need more help in understanding these rights, you may go to your local County Agricultural Commissioner's office, the local legal aid or worker's rights office or your union.

GENERAL. The purpose of this leaflet is to tell you about your right to know about work hazards and the California Department of Pesticide Regulation (DPR) pesticide regulations on hazard communication.

Pesticides include a wide variety of products commonly used in agricultural, as well as non-agricultural settings (such as landscaping, parks, restaurants or hospitals). Insecticides, herbicides, disinfectants and germicides are all types of pesticides.

The general purposes of hazard communication are to ensure that potential hazards are identified, and that you are informed about them through training, container labeling, and other forms of warning. Your employer is responsible for knowing and telling you, in a language you understand, about specific pesticides you will be handling, and how you should protect yourself to safely handle them.

Pesticides are only one kind of hazardous substance that may be in the workplace. Hazard communication for other materials is covered by Cal/OSHA standards found in Title 8, California Code of Regulations, Section 5194. Complaints about pesticide problems should be filed with the County Agricultural Commissioner. Complaints about other safely problems should be filed with Cal/OSHA. The telephone number can be found in the government pages of the telephone book.

HAZARD IDENTIFICATION. The identification of hazards associated with pesticides is done by the Federal Environmental Protection Agency (EPA) and DPR as part of the pesticide product registration and label approval process. This process must be completed before the manufacturer can sell a pesticide. In addition to the "active" ingredients listed on the product label, pesticides commonly contain several "inert" ingredients which are not usually identified on the label. However, if the identity of inert ingredients is needed to treat an acute case of pesticide poisoning your physician can usually obtain the information from the manufacturer or possibly from DPR. These inert ingredients can also have toxic properties and hazards of their own.

The pesticide label reflects the overall toxicity and hazards of the mixture. Signal words provide general information about acute eye or skin injury or poisoning potential. The signal word "DANGER" is used to tell you about high hazard products. "WARNING" means moderate hazard and "CAUTION" means the hazard is fairly low. The manufacturer is required to address hazards by placing specific information or precautions on the pesticide label. If the hazard is severe eye or skin injury the label will have precautionary

statements such as: "Corrosive, causes eye and skin damage". If the pesticide is very poisonous, the label will show the skull and crossbones symbol and the word "POISON". Language such as "fatal" or "may be fatal if swallowed, inhaled, or absorbed through the skin" also indicates high toxicity. Some labels will have warnings about known or suspected effects such as cancer, organ damage, or birth defects. However, since new information may become available and take some time to be included on labels, you cannot rely totally on labels to identify hazards. Your employer must have a copy of the MSDS for the pesticide on file, if available. Other sources may include industry trade bulletins, government hazard alerts, and Pesticide Safety Information Series leaflets. More information on interpreting the safety precautions on pesticide labels is found in PSIS A-1.

TRAINING/EDUCATION. Training is one important way that information about hazards and how to protect against them is made available to you. If you work with pesticides you must be given adequate training about handling pesticides. You must be given training before you begin to work with pesticides and you must be given refresher training each year. You must fully understand the immediate and long term hazards of use and know the procedures you should follow, including the operation of pesticide handling equipment and the use of work clothing and protective equipment, to safely work with the specific pesticides you will be handling. Training must also include the common symptoms of poisoning, regulations, label requirements, and the need for immediate decontamination of the skin and eyes when exposure occurs. This training must cover the contents of any appropriate PSIS leaflet. There are additional special training requirement, for those who must use respiratory protection, outlined in PSIS A-5, Respiratory Protection. This training must be documented in writing and signed by you.

You must be informed about where and how you can obtain access to all of the work-related documents and records that must be kept (see Table 1). You must also be informed about where and how to obtain access to this PSIS, the MSDS and pesticide use records.

LABELS AND OTHER FORMS OF WARNINGS. In addition to training, there are a number of other ways that information is provided to you (see Table 1). The product label not only provides instructions for use, that are legally required to be followed, but also provides valuable hazard information. The labeling that covers the particular use must be present at the worksite. Normally this is the label on the container. However, if the use is only described on a product bulletin or other supplemental labeling, or if a service container (any container that is not the original manufacturer's container) is being used, your employer must ensure that the proper labeling is present.

Pesticides should be kept in their original container with the original label intact whenever possible. If they are repackaged into service containers, do not use food, drink, or household product containers. Service containers should be labeled to identify the pesticide, its signal word, and the person or firm responsible.

Warning notices must be posted, facing all directions of probable approach, around areas where pesticides or containers with the signal words "DANGER" or "WARNING" are stored. It must be in a language you understand. More information on pesticide storage, transportation, and disposal is found in PSIS A-2.

The operator of the property must assure that you and others (including any other employer who might have employees), who are on or likely to enter treated areas, are warned about the identity of the pesticide and the precautions to be observed, including any applicable reentry intervals. This may be done by posting signs around treated fields. If signs are not required by label or regulations you may be told orally. Follow directions about keeping out of treated fields or restricted areas.

To test pesticides for the possibility that they might cause cancer, birth defects or other harmful effects

scientists give the pesticides to laboratory animals (rats, mice, rabbits, dogs) at very high levels. If State scientists find that there is enough evidence that a chemical causes cancer, birth defects or other reproductive harm, the chemical is put on the Proposition 65 list (a list of chemicals known to cause cancer or reproductive toxicity). If a pesticide is on this list, your employer must warn you if you are exposed to too much. The warning may say something like, "[Pesticide name] is known to the State of California to cause cancer or reproductive effects. The use of the chemical is subject to the provisions of the Safe Drinking Water and Toxic Enforcement Act of 1986. These provisions include the requirement that persons who are exposed to levels of the chemical that present a significant risk are warned that the chemical is known to the State of California to cause cancer or birth defects." See Table 2 for a list of the currently registered pesticides that are on the Proposition 65 list.

EXPOSURE MONITORING. If you *regularly handle* (see definition below) organophosphate or carbamate pesticides with the signal word "DANGER" or "WARNING" for use on agricultural crops, there are requirements for medical supervision and blood testing to detect overexposure. These requirements are covered in PSIS B-1.

This workplace: DOES _____
DOES NOT _____
use these pesticides on crops.

If they are used on crops, they are handled by any person:
_____ Six days or less each 30 days
_____ More than six days in 30 days
(*regularly handle*)

If they are regularly handled by anyone, the physician providing medical supervision is:

Name _____

Address _____

_____

Telephone number _____.

RECORDS. There are a number of records that must be maintained by your employer and made available to you (see Table 1). These records can be grouped into three general kinds; training, exposure, and medical supervision.

Records of training provided to you must be kept after being signed you. Records of the content of the training program must also be kept. Records must be kept for most kinds of pesticide use. If organophosphates (OP) or carbamates (C) are being used as described under exposure monitoring the record must include the pesticide, the date, and identity of the user. If organophosphate and carbamate pesticides are used on a regular basis records verifying the required medical supervision and response to any overexposure must be maintained.

The required records are kept at the following location at headquarters.

_____

_____

_____

EMERGENCY MEDICAL CARE

If you become ill or are injured on the job you should be taken for medical attention to:

_____

_____

_____

More information on first aid is available in PSIS A-4.

This leaflet is intended to assist readers in understanding pesticide regulations. It is not a legal document. The legal reference can be found in the California Code of Regulations, Title 3. The words "must" and "should" used in the text are not the same. The word "must" means the action is required and comes from California regulations. The word "should" means additional handling practices that are recommended to further reduce exposure.

HS-1571 Revised July 27, 1995
Roy Rutz and Susan Edmiston

Table 1

SUMMARY OF HAZARD COMMUNICATION RECORDS/DOCUMENTS

Record/Document	Retention	Location	Section
Training records	2 years	Headquarters	6724
Written training program	2 years	Headquarters	6724
Respirator program procedures	During use	Headquarters	6738(e)
Emergency response plan (fumigants)	During use	Worksite	6780
Pesticide Label	During use	Worksite	6602
Pesticide Safety Information Series	2 years	Headquarters	6723(b)
Material Safety Data Sheet	2 years	Headquarters	6723(b)
Treatment notification method[1]	2 years	Headquarters	6619
Field posting[1]	During use	Worksite	6776
Storage area posting[3]	During use	Worksite	6674
Identity of medical supervisor notice[2]	During use	Headquarters	6728
Employer/medical supervisor agreement[2]	3 years	Headquarters	6728
Medical supervisor recommendations[2]	3 years	Headquarters	6728
ChE blood test results[2]	3 years	Headquarters	6728
Employer's work practice review[2]	3 years	Headquarters	6728
Emergency medical care notice	During use	Worksite	6726
Medical evaluation (respirator use)	During use	Headquarters	6738(e)
Pesticide use records	2 years	Headquarters	6624
Employee exposure records[2]	3 years	Headquarters	6728

---

[1] Agricultural production
[2] Signal word "DANGER" or "WARNING", organophosphate and carbamate, agricultural production
[3] Signal word "DANGER" or "WARNING"

Additional information about these requirements is available from your County Agricultural Commissioner.

Table 2
CURRENTLY REGISTERED PESTICIDES ON THE PROPOSITION 65 LIST

PESTICIDES KNOWN TO THE STATE TO CAUSE CANCER

Acifluorfen
Alachlor
Arsenic, inorganic
Captan
Chlorothalonil
Chromium (Chromic acid - wood preservative)
Creosote
Daminozide
DDVP (dichlorovos)
p-Dichlorobenzene
1,3-Dichloropropene
Ethylene oxide
Folpet
Formaldehyde
Lindane
Mancozeb
Maneb
Metiram
Metronidazole
Oxadiazon
Pentachlorophenol
Propargite
Propylene oxide
Soots, tars & mineral oils

PESTICIDES KNOWN TO THE STATE TO CAUSE DEVELOPMENTAL TOXICITY

Benomyl
Bromoxynil
Cyanazine
Ethylene glycol monomethyl ether
Ethylene oxide
Methyl bromide (as a structural fumigant)
Nicotine (nicotine sulfate)
Warfarin

Pesticide Safety Information Series A

Worker Health and Safety Branch

A-9 HAZARD COMMUNICATION INFORMATION FOR EMPLOYEES WORKING IN FIELDS

WORKER RIGHTS. The law states that you must be told about potential hazards in the workplace, and must be trained to deal with them. There are also warning requirements to help you know when hazards are present. 1. You have the right to look at crop sheets, Material Safety Data Sheets and pesticide use records. 2. You have the right to file confidential complaints about unsafe work conditions without being punished by your employer. 3. If you get sick or injured at work you have the right to file a claim for worker's compensation. 4. Whoever pays you must make plans for medical care and see that you are taken to the doctor if you get sick on the job. Your employer will explain your rights to you. If you need more help in understanding these rights, go to your local County Agricultural Commissioner's office, the local legal aid, worker's rights office or your union.

GENERAL. The purpose of this leaflet is to tell you about your right to know about potential work hazards. This leaflet will also help your employer comply with these regulations. Your employer is responsible for knowing and telling you, in a language you understand, about specific pesticides that have been used, and how you should protect yourself from them.

Pesticides are only one kind of hazardous substance that may be in the workplace. Hazard communication for other materials is covered by Cal/OSHA standards found in Title 8, California Code of Regulations, Section 5194. Complaints about pesticide problems should be filed with the county agricultural commissioner. Complaints about other safety problems should be filed with Cal/OSHA.

HAZARD IDENTIFICATION. Before a pesticide can be sold and used in California, it is studied and reviewed to try to find out about harmful effects to people. Pesticide manufacturers are required to address these hazards on the product label. That is why the label requires certain protective clothing, and why there may be a time between when a pesticide is applied and when you can go back into a field.

REENTRY INTERVALS. You must not go into a field for any reason if the leaves are wet with the pesticide or if pesticide dust is still floating in the air. After a pesticide is put on a field it begins to go away. Some pesticides take longer than others to go away. A "reentry interval" is the time it should take for the pesticide to go away so it is safe to work.

Generally, work should not be done in a field during a reentry interval if it means you will be handling the plants. This includes work such as hand harvesting, thinning, weeding, tying, pruning, limb-propping, disbudding, girdling, throwing cane, and other work which requires you to handle the plants. Some pesticide labels allow for field work during the reentry interval.

Work such as irrigating and tractor driving can be done safely during a reentry interval if you are protected. If you go into a field, when it is allowed before the reentry interval is over, you must be protected by wearing gloves, work clothing that has long sleeves and long pants, and shoes and socks.

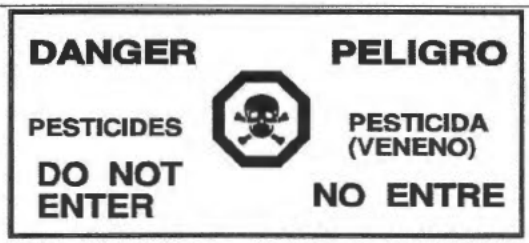
WARNINGS. The farmer must tell you and others who are likely to go into treated fields (including

greenhouses) about the pesticide, how long to stay out of the field and what you must do to protect yourself. If you are paid by a labor contractor, the labor contractor must tell you about these things.

To test pesticides for the possibility that they might cause cancer, birth defects or other harmful effects scientists give the pesticides to laboratory animals (rats, mice, rabbits, dogs) at very high levels. If State scientists find that there is enough evidence that a chemical causes cancer, birth defects or other reproductive harm, the chemical is put on the Proposition 65 list (a list of chemicals known to cause cancer or reproductive toxicity). If a pesticide is on this list, your employer must warn you if you are exposed to too much. The warning may say something like, "[Pesticide name] is known to the State of California to cause cancer or reproductive effects. The use of the chemical is subject to the provisions of the Safe Drinking Water and Toxic Enforcement Act of 1986. These provisions include the requirement that persons who are exposed to levels of the chemical that present a significant risk are warned that the chemical is known to the State of California to cause cancer or birth defects." See Table 1 for a list of the currently registered pesticides that are on the Proposition 65 list.

POSTING. The farmer must put up signs like the following whenever there is a reentry interval over a week long.

For some vegetable, tree, and vine crops, signs like the following must be put up if a pesticide with "DANGER" on the label has a reentry interval of two days or more.



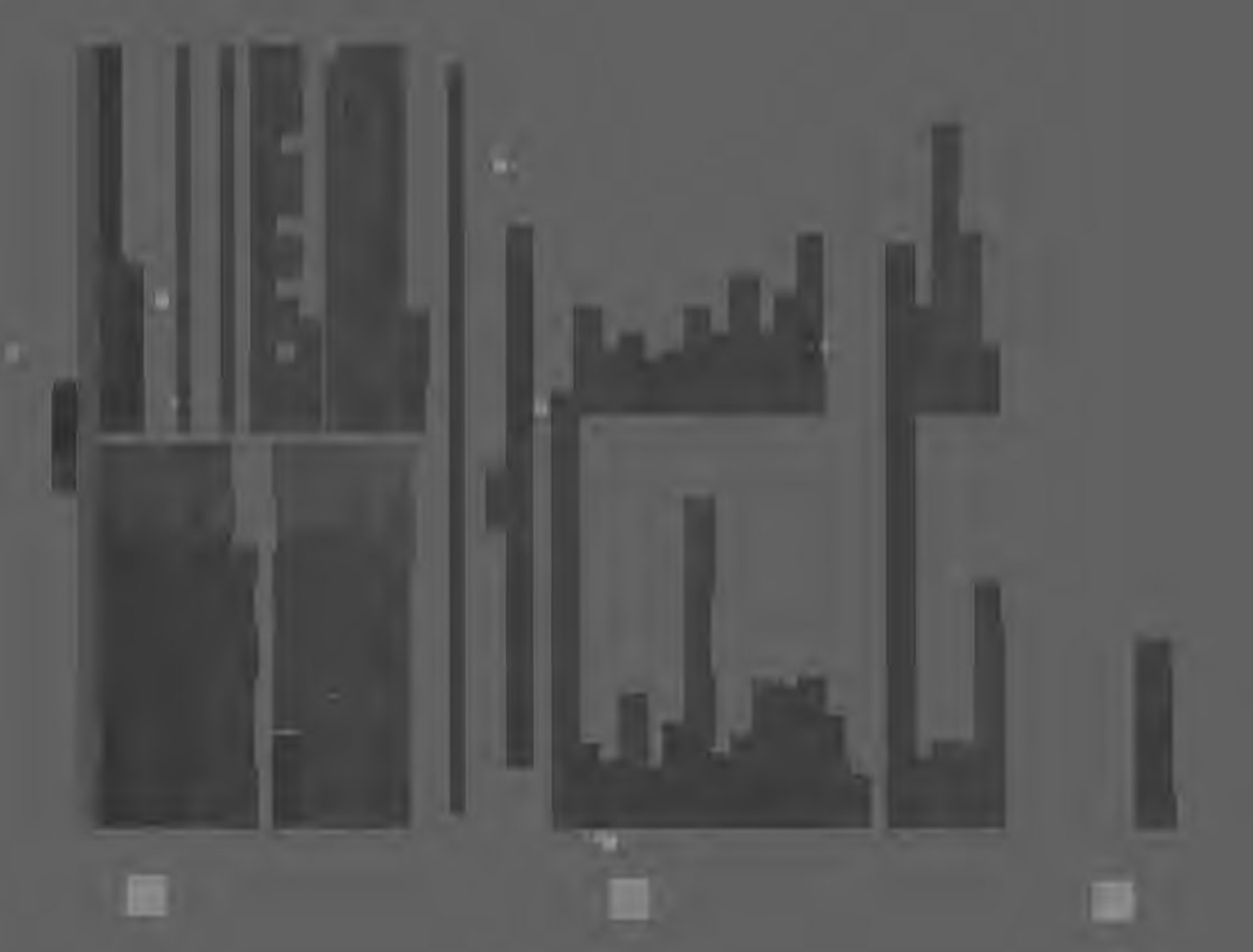
Both signs mean the same thing. Other reentry intervals are not required to be posted. The signs must be put up at places where you usually go into the field and every 600 feet along unfenced roads. The signs must be put up before the pesticide is applied and taken down after the reentry interval ends.

TRAINING. Whoever pays you must have a crop sheet for that crop at the field, if available so you can look at it. The crop sheet will tell you about some pesticides that might have been applied to the crop this year, and how to protect against over-exposure. It will also give you information about poisoning.

If you irrigate, drive tractor or do other work, when allowed, during the reentry interval, you should be told about the pesticide and the reentry interval, how to work safely and to take a shower or bath after work.

If you are a work crew leader in the field you have an important job. You must be told how to know if a field is safe to do the work and what to do if someone in the crew does get sick or injured in the field. Knowing to look for posted signs or asking about reentry intervals before going into a field to work will help to keep workers from getting sick.

People get sick from many different causes at home or at work. Pesticides can make you sick. The symptoms can be the same as having the flu or other common illness. If you get a headache, dizziness, upset stomach, blurred vision, or other flu-like symptoms, rashes or eye irritation, while working in the field you should ask your boss to take you to the doctor because these symptoms can be caused by pesticide poisoning. Whoever pays you must make plans for medical care and see that you are taken to the doctor if you get sick on the job.



Pesticide Safety Information Series A

Worker Health and Safety Branch

A-10 MINIMAL EXPOSURE PESTICIDES

GENERAL INFORMATION: The Minimal Exposure Pesticide (MEP) list was established to inform users of pesticides that have hazards that are not identified by the well known label signal word system of "DANGER", "WARNING" or "CAUTION". One of these signal words is found on every pesticide label. The use of signal words began many years ago and was continued by the U.S. Environmental Protection Agency when they were given authority to regulate pesticides by the U.S. Congress in 1972. The signal words give the user a good idea of the pesticide's ability to cause immediate (acute) illness or injury.

We are now more concerned that some pesticides can cause other kinds of health effects that the person exposed may not know about for a long time after the exposure. Some of these health effects (like cancer) can be caused by exposure to small amounts of pesticide over a long period of time. Other effects (such as birth defects) can be caused by exposure to very small amounts of pesticide at a critical time. These types of adverse effects are not identified by the signal words. Because of these problems, the Minimal Exposure Pesticide regulations were developed to inform workers about the potential effects of some pesticides.

Some of the MEP labels will have the signal word "CAUTION" on them. This would normally mean that a worker handling that particular pesticide might not need to be as careful when handling it. This is not true for MEPs. One may not become sick or injured, at least not right away, from excessive exposure to a pesticide on the MEP list, but that exposure could be doing damage in your body if handled carelessly.

Minimal Exposure Pesticides:

1. Bromoxynil (Buctril®) - Bromoxynil is a herbicide used to kill annual broadleaf weeds in grain crops, corn, sorghum, flax, garlic and onions. In experimental animals, it has been shown to cause birth defects and harmful effects in the pregnant animal. These effects may occur at very low levels of exposure. Since the worker may not be aware that a potentially harmful exposure has taken place, bromoxynil was put on the MEP list.

2. Oxydemeton-methyl (Metasystox-R) - Oxydemeton-methyl is an insecticide and miticide used on fruit and vegetable crops. It is in a class of chemicals that affects an enzyme that is necessary for proper functioning of the nervous system. Acute poisoning can lead to symptoms like headache, nausea, vomiting, weakness and blurred vision. Oxydemeton-methyl has also been shown to cause adverse effects on the male reproductive system. Because these effects may occur at very low levels, oxydemeton-methyl was added to the MEP list.

3. Propargite (Omite®, Comite®) - Propargite is a widely used pesticide used to kill mites on cotton, corn, citrus, grapes, strawberries, stone fruit and other crops. Acute symptoms of overexposure include skin and eye irritation, coughing and sore throat. Propargite has been shown to cause toxicity (less weight gain) in the pregnant experimental animals. It has also lead to cancer in experiments in laboratory animals. This effect may occur at very low levels of exposure so propargite was put on the MEP list.

   * Folpet is also listed as an MEP. However, currently the only products registered are paints, coatings and caulkings. The use of these products are exempt from the MEP requirements.

MEP USE REQUIREMENTS: The MEP regulations apply regardless of the signal word on the label. In addition to following the safety precautions on the label and in California regulations, the employer must also provide to employees handling MEPs the following:

a) An area with clean towels, soap and water where workers can change clothes and wash at the end of the day and a clean, pesticide-free place for employees to store personal clothing not in use while handling pesticides;

b) Clean towels, soap and clean water at the mix/load site for routine or emergency washing;

c) Clean work clothing (long-sleeved shirt and long pants or coveralls). Employers must ensure that employees start each work day with clean work clothing;

d) A closed system, except for employees who handle a total of one gallon or less per day in original containers of one gallon or less;

e) Clean full body, chemical resistant clothing that covers the head, torso, arms, hands, legs and feet; and

f) Appropriate, clean respiratory protection.

There are some general exemptions to the MEP requirements for full body protective clothing when mixing/loading with a closed system or using sealed water soluble packets, when applying from enclosed cab spray equipment, when incorporating pesticides directly into the soil, when flagging from inside an enclosed vehicle, when applying with booms mounted below and behind the applicator, and when applicators are incorporating the pesticide directly into the soil. [See Title 3 of the California Code of Regulations section 6793(d) for more specific information on these exemptions.]

EXEMPTIONS AND ADDITIONAL PRECAUTIONS:

1. Oxydemeton-methyl
   a) Application to ornamental landscape trees and shrubs must be made by trunk injection or soil injection methods only; and
   b) Applications within a greenhouse are not allowed.

2. Propargite - Applications within a greenhouse are not allowed.

The words "must" and "should" are not the same. The word "must" indicates the action is required and comes from California regulations or product labeling that has included the latest EPA requirements. Some product labels may not have been changed to include the latest EPA safe handling requirements. The word "should" is a recommendation for additional safe handling to reduce exposure.

Pesticide Safety Information Series B

Worker Health and Safety Branch

B-1 MEDICAL SUPERVISION

General Information: Medical supervision involves the provision of an occupational health evaluation and illness prevention by a licensed physician. Medical supervision must be provided when an employee regularly handles (mix, load, apply, flag for an application, and/or clean or repair pesticide- handling equipment for more than 6 days in any 30-day period) an organophosphate or N-methyl carbamate pesticide with the signal word "DANGER" or "WARNING" on the label used for the production of an agricultural crop. Medical supervision for the above employees must involve cholinesterase monitoring. Examples of organophosphates include Guthion®, Diazinon, and Phosdrin®. Examples of N-methyl carbamates include Lannate®, Temik® and Carzol®.

Cholinesterase monitoring should be considered an integral part of the workplace safety program. The cholinesterase test is used to measure exposure to pesticides containing organophosphates and N-methyl carbamates and to correct any problems with faulty equipment or bad work practices or to remove the employee from more exposure before becoming clinically ill. At the present time, a blood test is the only practical means of obtaining this information.

Baseline: With this blood test it is not useful to compare the results to a "normal" level. Thus, it is desirable to obtain a preexposure "baseline" value. A baseline test is required for each employee who will regularly handle these pesticides. A baseline blood sample should be taken at a time when the worker has not been exposed to organophosphates or carbamates for at least 30 days.

Cholinesterase Testing: All cholinesterase testing for occupational exposure to pesticides should include both RBC (red blood cell) and plasma (or serum) cholinesterase analysis. The two tests have different meanings, and the combined report is needed for the physician to make a proper evaluation. N-methyl carbamates react with the enzyme differently than do organophosphates. Following exposure to N-methyl carbamates, blood needs to be drawn and the lab analysis completed quickly or the physician will not be able to determine extent of exposure or the seriousness of the safety problems on the job.

New employees must be tested at the end of each of the first of three 30-day periods of regularly handling. After that, the periodic monitoring is reduced to every second 30- day period of regularly handling. Begin counting 30-day periods on the first day of exposure. It is possible that each period may be separated by a time of non-use. After the first three tests the medical supervisor may adjust the testing schedule to reflect work practices, pesticide use or prior test results.

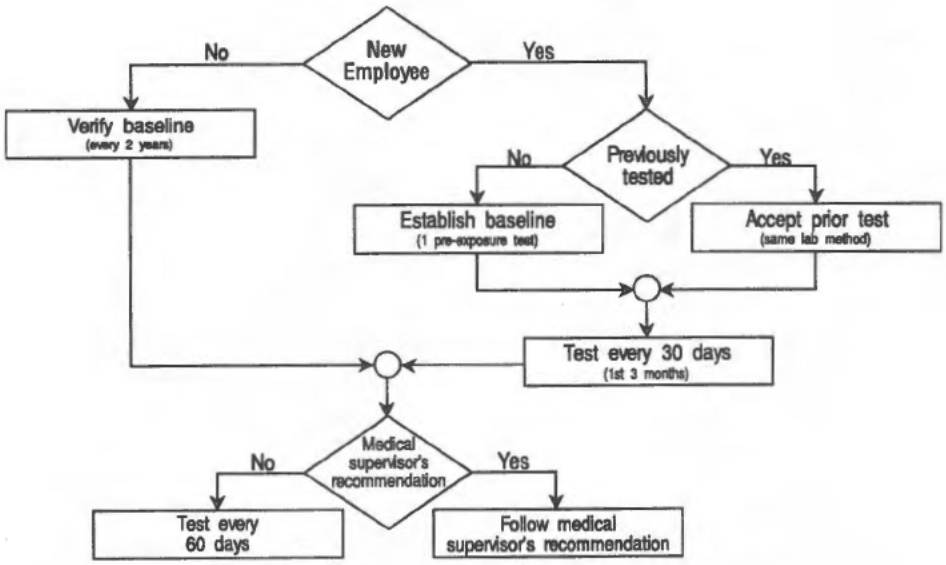
Laboratory methods for cholinesterase enzyme differ. Results obtained by different methods cannot easily be compared. Therefore, cholinesterase monitoring for a given person should be performed in the same laboratory, using the same method.

Response: Even though a change in an individual's cholinesterase level may result from something other than pesticide exposure this should never be assumed to be the case. The employer must investigate work practices, and take steps to correct unsafe situations, whenever an employee's cholinesterase level drops below 80% of the baseline value. If the RBC level drops to 70% or the plasma level drops to 60% of the employee's baseline, the employer must ensure that all exposure to organophosphates or N-methyl carbamates for that person be stopped and not resumed until both levels return to at least 80% of the baseline level.

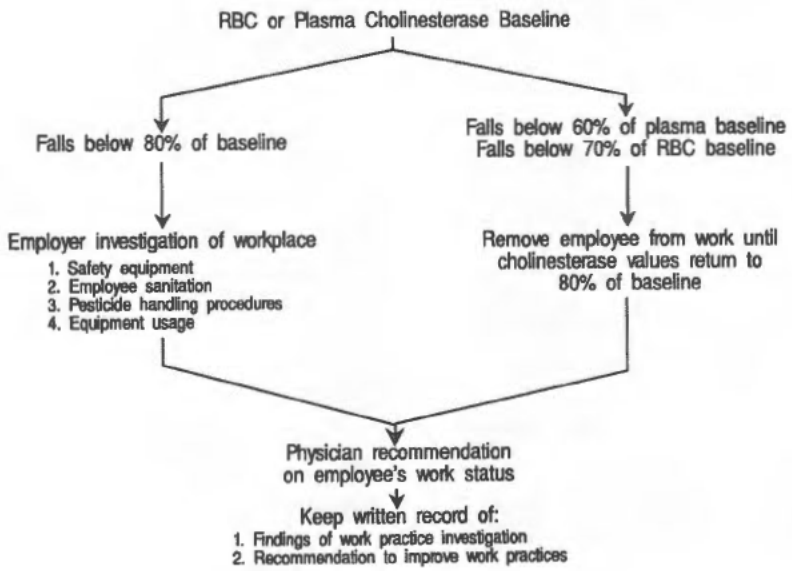
In order to expedite quick reporting of laboratory test results, physicians may instruct laboratories to mail copies of results to employers at the same time they are sent to physicians. Physicians may also, at the time an individual's baseline is determined, set minimum acceptable levels for both plasma and RBC results for that specific employee. This will give the employer guidance for early detection of a possible problem. The interpretation of cholinesterase testing should be done only by a licensed physician. Others involved in this safety program are only following guidelines set by the medical supervisor and should be careful to not assume the role of interpreting test results and making diagnoses.

Additional information on medical supervision is contained in guidelines for physicians published by the California Environmental Protection Agency, Office of Environmental Health Hazard Assessment.

Medical Supervision Program



Response to Low Blood Test Results


RBC or Plasma Cholinesterase Baseline
Falls below 80% of baseline
Falls below 60% of plasma baseline
Falls below 70% of RBC baseline
Employer investigation of workplace
1. Safety equipment
2. Employee sanitation
3. Pesticide handling procedures
4. Equipment usage
Remove employee from work until cholinesterase values return to 80% of baseline
Physician recommendation on employee's work status
Keep written record of:
1. Findings of work practice investigation
2. Recommendation to improve work practices

Qualified Applicator License Pest Control Categories

This document is intended to provide general information to help applicators identify the most appropriate category for the type of pest control they will be performing or supervising for the pest control business. Persons involved in the business of pest control must, in conjunction with the Qualified Applicator License (QAL), obtain a Pest Control Business License (PCBL). (Note: To qualify for a PCBL, the applicant must have a QAL or employ a person that has a QAL.) Questions about the pest control categories can be directed in writing to the Pesticide Enforcement Branch, 1020 N Street, Room 300, Sacramento, California 95814-5624; or call [redacted]

The following pest control categories apply to the Qualified Applicator License:

A. ***Residential, Industrial and Institutional.*** This category allows a person involved in the business of pest control for hire, under a Pest Control Business License, to use or supervise the use of restricted use pesticides and/or any other pesticide or pest control method or device to control pests in the following situations:

--Post harvest treatment of agricultural commodities.
--Treatment of stored agricultural commodities.
--Treatment of nonlandscaped outdoor areas directly related to the operation of buildings or facilities.
--Sanitizing potable lines, dairy milk lines, and other similar areas.
--Bird Control on structures.

There may be other situations that fall under this limited scope. Consult with the Department of Pesticide Regulation, Pesticide Enforcement Branch, Licensing and Certification Program for more information.

Structural pest control for hire is **not** allowed under this category. Structural pest control involves the control of pests which may invade households or other structures. A business involved in structural pest control for hire is licensed by the Department of Consumer Affairs, Structural Pest Control Board. For more information, write to the Structural Pest Control Board, 1422 Howe Avenue, Suite, 3, Sacramento, California 95825-3280; or call [redacted]

A person who is **not in the business** of pest control or structural pest control for hire, may use this category also to use or supervise the use of restricted use pesticides and/or any other pesticide to control pests in the following situations:

--Human dwellings (e.g., homeowner).
--Industrial establishments (e.g., packing plants, food manufacturing and processing plants, warehouses, grain elevators and factories).
--Institutions (e.g., schools, hospitals, and office buildings).
--Nonlandscaped outdoor areas directly related to the operation of the buildings or facilities (e.g., storage yards, tank farms). This category does not cover the use of pesticides for landscape maintenance. Landscape maintenance is covered under the scope of Category B - Landscape Maintenance.

B. ***Landscape Maintenance.*** This category allows a person to use or supervise the use of restricted use pesticides and/or any other pesticide or pest control method or device to control pests in natural or planted ornamental and turf landscaped areas and other outside areas around buildings. Typical areas included in this category are residential yards (including home gardens and orchards), recreation areas, school yards, vacant lots, storage yards, cemeteries, greenbelts, and other similar sites. It also includes landscaped street medians and

B. ***Landscape Maintenance (continued)***
sidewalk areas, and areas such as walkways and parking lots directly related to landscaped areas. In addition, this category covers landscaped areas in enclosed shopping malls and indoor plants.

NOTE: Maintenance Gardeners who apply any pesticide (restricted use and/or general use) incidental to their gardening business must obtain a Maintenance Gardener Pest Control Business License. To qualify for this business license the gardener needs a Qualified Applicator Certificate or Qualified Applicator License with the Landscape Maintenance Pest Control Category. This business license limits the gardener to incidental pest control in ornamental and turf planting indoors, in commercial parks, or surrounding structures.

C. ***Right-of-Way.*** This category allows a person to use or supervise the use of restricted use pesticides and/or any other pesticide or pest control method or device to control pests in the maintenance of roads, highways, powerlines, phonelines, pipelines, canals, railroads or other similar sites. It also may include landscaped right-of-way areas which are necessary to prevent erosion to the right-of-way. This category does not include direct application to running or standing water.

D. ***Plant Agriculture.*** This category allows a person to use or supervise the use of restricted use pesticides and/or any other pesticide or pest control method or device to control pests in the production of food, feed, fiber or ornamental crops as well as on grasslands and non-crop agricultural areas. Except for applications to rice and similar crops grown in wet or flooded fields, this category does not cover applications to running or standing water.

E. ***Forest.*** This category allows a person to use or supervise the use of restricted use pesticides and/or any other pesticide or pest control method or device to control pests in forest, forest nurseries and forest seed-producing areas. This category does not include direct applications to running or standing water.

F. ***Aquatic.*** This category allows a person to use or supervise the use of restricted use pesticides and/or any other pesticide or pest control method or device to control pests in or on standing or running water. It also includes applications to control roots invading sewer lines or pipelines. This category does not include the use of restricted use pesticides for Health Related, Regulatory, or Demonstration and Research pest control purposes.

G. ***Regulatory.*** This category allows a person to use or supervise the use of restricted use pesticides and/or any other pesticide or pest control method or device in official government programs for the control of regulated pests. "Regulated pest" means a specific organism considered by a State or federal agency to be a pest, requiring regulatory restrictions or control procedures in order to protect the host, public, and/or the environment.

NOTE: This category is not required of persons who apply pesticides provided that they hold all categories necessary to cover the types of pest control to be performed, even though the pests may coincidentally be regulated pests.

H. ***Seed Treatment.*** This category allows a person to use or supervise the use of restricted use pesticides and/or any other pesticide or pest control method or device to protect seed for planting.

I. ***Animal Agriculture.*** This category allows a person to use or supervise the use of restricted use pesticides and/or any other pesticide or pest control method or device to control pests on animals and the facilities in which the animals are confined. Barns, sheds and corrals can be treated under this category to control animal-infesting pests. *(Treatment to*

Qualified Applicator License
Pest Control Categories

I. ***Animal Agriculture (continued)***
control other pests infesting barn or corral wood, or termites would be under Subcategory L - Wood Preservatives or a Structural Pest Control License.)

J. ***Demonstration and Research.*** This category allows a person to use or supervise the use of a restricted use pesticides and/or any other pesticide when demonstrating proper application techniques or conducting field research. This category is not required of applicators who demonstrate proper techniques provided they hold all specific categories covering the types of pest control being performed.

K. ***Health Related.*** This category allows a person to use or supervise the use of restricted use pesticides and/or any other pesticide or pest control method or device in official programs for the management and control of pests having medical and public health importance.

L. ***Wood Preservatives (Subcategory of A and/or C).*** This category allows a person to use or supervise the use of restricted use pesticides and/or any other pesticide or pest control method or device to control pest that damage wood. This category allows application of wood preservation materials within the scope of Category A - Residential, Industrial and Institutional, and Category C - Right-of-Way pest control.

STATE OF CALIFORNIA
DEPARTMENT OF PESTICIDE REGULATION

QUALIFIED APPLICATOR LICENSE

	CATEGORIES SEE REVERSE
LICENSE NUMBER	VALID THROUGH

(BROWN COLORED CARD)

Who Needs It?

Any person who uses or supervises the use of federally restricted use pesticides or State restricted materials for any purpose or on any property other than that provided by the definition of "private applicator" [CCR §6000.2(a)(b)(c)]. Also, any person who supervises the pesticide applications made by a licensed Agricultural Pest Control Business License or Maintenance Gardener Pest Control Business (FAC §§11701-11709). This person is responsible for the safe and legal operations of the pest control business.

What's Required?

- Submit an application fee of $40.00 (FAC §12201).
- Pass examinations on laws and regulations and at least one pest control category. The pest control categories available under this license are as follows (FAC §12203):

  A. Residential, Industrial, and Institutional
  B. Landscape Maintenance
  C. Right-of-Way
  D. Plant Agriculture
  E. Forest
  F. Aquatic
  G. Regulatory
  H. Seed Treatment
  I. Animal Agriculture
  J. Demonstration and Research
  K. Health Related
  L. Wood Preservative (Subcategories of A and/or C)

Additional Requirements!

- Accumulate at least 20 hours of approved continuing education every two years before certificate renewal. Four of the 20 hours must cover the topic of pesticide laws and regulations (CCR §6511).
- QAL holders who have only the Landscape Maintenance Pest Control Category (Category B) and who currently possess a valid Maintenance Gardener Pest Control Business License, only need eight hours of approved continuing education. Two of the eight hours must cover the topic of pesticide and pest control laws and regulations (CCR §6511).

References: FAC Sections 11701.5, 11704, 12201-12205 and CCR Sections 6000, 6000.2, 6404

Qualified Applicator Certificate Pest Control Categories

This document is intended to provide general information to help applicators identify the most appropriate category for the type of pest control they will be performing. Questions about the pest control categories can be directed in writing to the Pesticide Enforcement Branch, 1020 N Street, Room 300, Sacramento, California 95814-5624 or call [redacted]

The following pest control categories apply to the Qualified Applicator Certificate:

A. ***Residential, Industrial and Institutional.*** This category allows a person to use or supervise the use of restricted use pesticides to control pests in human dwellings, industrial establishments (including packing plants, food manufacturing and processing plants, warehouses, grain elevators and factories) or institutions (including schools, hospitals and office buildings). Also included in this category are nonlandscaped outside areas (such as storage yards or tank farms) directly related to the operation of buildings. This category does not cover the use of pesticides for landscape maintenance.

NOTE: Structural pest control for hire is **not** allowed within the scope of this category. Structural pest control involves the control of pests which may invade households or other structures. A business involved in structural pest control for hire is licensed by the Department of Consumer Affairs, Structural Pest Control Board. For more information, write to the Structural Pest Control Board, 1422 Howe Avenue, Suite 3, Sacramento, California 95825-3280; or call [redacted]

B. ***Landscape Maintenance.*** This category allows a person to use or supervise the use of restricted use pesticides to control pests in natural or planted ornamental and turf landscaped areas and other outside areas around buildings. Typical areas included in this category are residential yards (including home gardens and orchards), recreation areas, school yards, vacant lots, storage yards, cemeteries, greenbelts, and other similar sites. It also includes landscaped street medians and sidewalk areas, and areas such as walkways and parking lots directly related to landscaped areas. In addition, this category covers landscaped areas in enclosed shopping malls and indoor plants.

NOTE: Maintenance Gardeners who apply any pesticide (restricted use and/or general use) incidental to their gardening business must obtain a Maintenance Gardener Pest Control Business License. To qualify for this business license the gardener needs a Qualified Applicator Certificate with the Landscape Maintenance Pest Control Category. This business license limits the gardener to incidental pest control in ornamental and turf planting indoors, in commercial parks, or surrounding structures. The Department considers "commercial parks" and "surrounding structures" to mean the following:

1. A "commercial park" is a tract of land where several commercial establishments (e.g. stores, offices, restaurants, warehouses, factories) are located. Business parks, industrial parks, office parks, and shopping centers or malls are considered commercial parks.

B. ***Landscape Maintenance (continued).***
2. Plantings "surrounding structures" are ornamental and turf plantings that are incidental to and placed near or close to structures such as buildings, brick walls, fountains, fences, statues, etc.

C. ***Right-of-Way.*** This category allows a person to use or supervise the use of restricted use pesticides to control pests in the maintenance of roads, highways, powerlines, phonelines, pipelines, canals, railroads or other similar sites. It also includes landscaped right-of-way areas. This category does not include direct application to running or standing water.

D. ***Plant Agriculture.*** This category allows a person to use or supervise the use of restricted use pesticides to control pests in the production of food, feed, fiber or ornamental crops as well as on grasslands and non-crop agricultural areas. Except for applications to rice and similar crops grown in wet or flooded fields, this category does not cover applications to running or standing water.

E. ***Forest.*** This category allows a person to use or supervise the use of restricted use pesticides to control pests in forest, forest nurseries and forest seed-producing areas. This category does not include direct applications to running or standing water.

F. ***Aquatic.*** This category allows a person to use or supervise the use of restricted use pesticides to control pests in or on standing or running water. It also includes applications to control roots invading sewer lines or pipelines. This category does not include the use of restricted use pesticides for Health Related, Regulatory, or Demonstration and Research pest control purposes.

G. ***Regulatory.*** This category allows a person to use or supervise the use of restricted use pesticides in official government programs for the control of regulated pests. "Regulated pest" means a specific organism considered by a State or federal agency to be a pest, requiring regulatory restrictions or control procedures in order to protect the host, public, and/or the environment.

NOTE: This category is not required of persons who apply pesticides provided that they hold all categories necessary to cover the types of pest control to be performed, even though the pests may coincidentally be regulated pests.

H. ***Seed Treatment.*** This category allows a person to use or supervise the use of restricted use pesticides to protect seed for planting.

I. ***Animal Agriculture.*** This category allows a person to use or supervise the use of restricted use pesticides to control pests on animals and the facilities in which the animals are confined. Barns, sheds and corrals can be treated under this category to control animal-

Qualified Applicator Certificate
Pest Control Categories

I. ***Animal Agriculture (continued).***
infesting pests. *(Treatment to control other pests infesting barn or corral wood, or termites would be under Subcategory L - Wood Preservatives or a Structural Pest Control License.)*

J. ***Demonstration and Research.*** This category allows a person to use or supervise the use of a restricted use pesticide when demonstrating proper application techniques or conducting field research. This category is not required of applicators who demonstrate proper techniques provided they hold all specific categories covering the types of pest control being performed.

K. ***Health Related.*** This category allows a person to use or supervise the use of restricted use pesticides in official programs for the management and control of pests having medical and public health importance.

L. ***Wood Preservatives (Subcategory of A and/or C).*** This category allows a person to use or supervise the use of restricted use pesticides to control pest that damage wood. This category allows application of wood preservation materials within the scope of Category A-Residential, Industrial and Institutional, and Category C - Right-of-Way pest control.

M. ***Antifouling Paints or Coatings Containing Tributyltin (Subcategory of A).*** This category allows a person to use or supervise the use of antifouling paints or coatings containing Tributyltin to control the growth of aquatic organisms on the hulls of ships.

NOTE: California law only allows the use of this pesticide on aluminum vessel hulls, on commercial or recreational vessel hulls 82 feet or more in length, or outboard motors and lower drive units.

STATE OF CALIFORNIA
DEPARTMENT OF PESTICIDE REGULATION

QUALIFIED APPLICATOR CERTIFICATE

	CATEGORIES SEE REVERSE
CERTIFICATE NUMBER	VALID THROUGH

(SILVER COLORED CARD)

Who Needs It?

Any person who uses or supervises the use of federally restricted use pesticides or State restricted materials for any purpose or on any property other than that provided by the definition of "private applicator" [CCR §6000.2(a)(b)(c)]. This certificate is also required by anyone who is in the business of landscape maintenance and performs pest control that is incidental to such business. In this situation, the Qualified Applicator Certificate (QAC) holder would have to possess the Landscape Maintenance Pest Control Category on their certificate, and obtain a Maintenance Gardener Pest Control Business License.

What's Required?

- Submit an application fee of $25.00 (FAC §14152).
- Pass examinations on laws and regulations and at least one pest control category. The pest control categories available under this certificate are as follows:

  A. Residential, Industrial, and Institutional
  B. Landscape Maintenance
  C. Right-of-Way
  D. Plant Agriculture
  E. Forest
  F. Aquatic
  G. Regulatory
  H. Seed Treatment
  I. Animal Agriculture
  J. Demonstration and Research
  K. Health Related
  L. Wood Preservative (Subcategories of A and/or C)
  M. Antifouling Tributyltin (Subcategory of A)

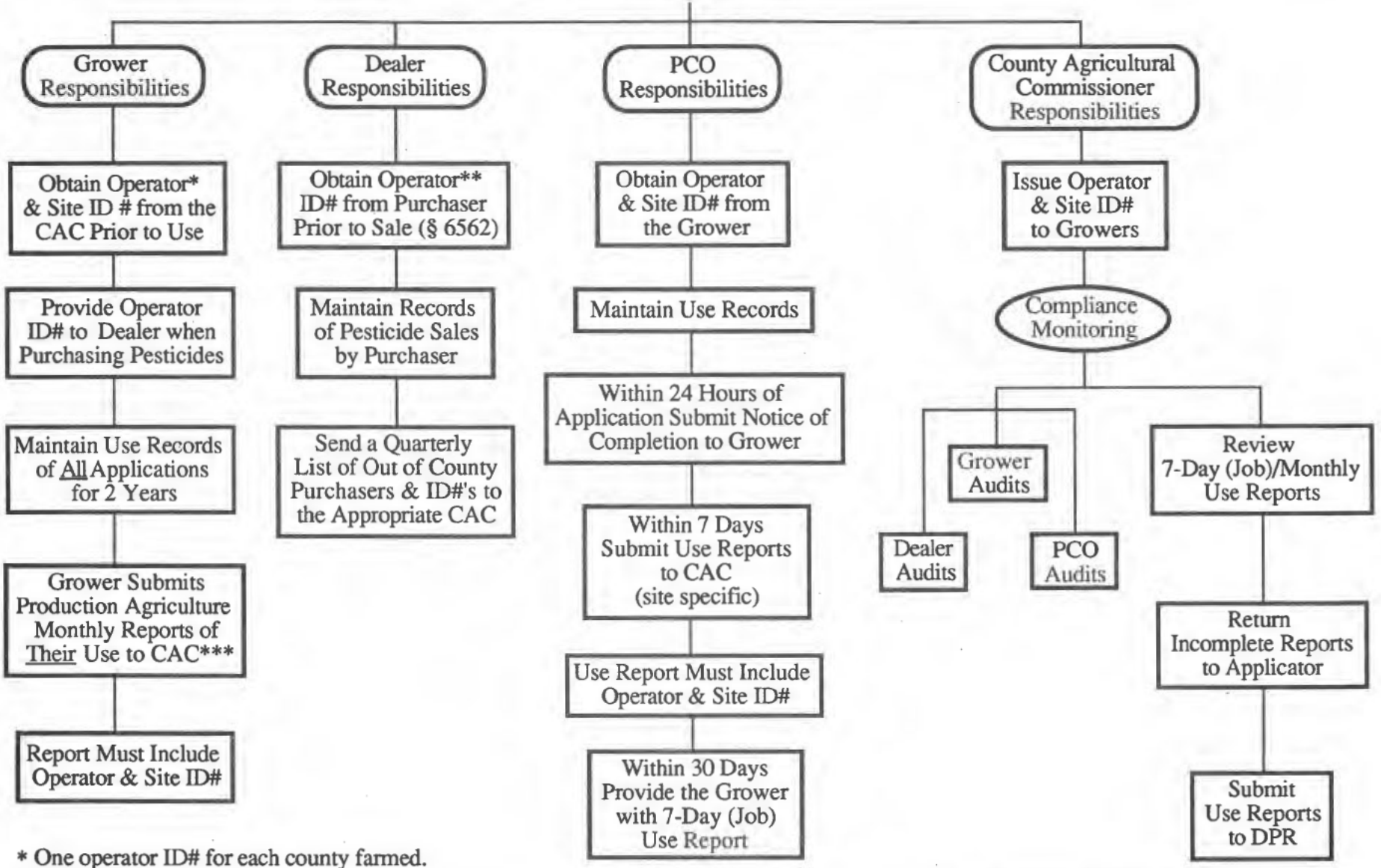
Additional Requirements!

- Accumulate at least 20 hours of approved continuing education every two years before certificate renewal. Four of the 20 hours must cover the topic of pesticide laws and regulations (CCR §6511).
- QAC holders who have only the Landscape Maintenance Pest Control Category (Category B) and who currently possess a valid Maintenance Gardener Pest Control Business License, only need eight hours of approved continuing education. Two of the eight hours must cover the topic of pesticide and pest control laws and regulations.

References: FAC Sections 11704, 14151-14155 and CCR Sections 6000, 6000.2, 6404

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY - DEPARTMENT OF PESTICIDE REGULATION
USE REPORTING SYSTEM

PRODUCTION AGRICULTURE


Grower Responsibilities
Obtain Operator* & Site ID # from the CAC Prior to Use
Provide Operator ID# to Dealer when Purchasing Pesticides
Maintain Use Records of All Applications for 2 Years
Grower Submits Production Agriculture Monthly Reports of Their Use to CAC***
Report Must Include Operator & Site ID#
Dealer Responsibilities
Obtain Operator** ID# from Purchaser Prior to Sale (§ 6562)
Maintain Records of Pesticide Sales by Purchaser
Send a Quarterly List of Out of County Purchasers & ID#'s to the Appropriate CAC
PCO Responsibilities
Obtain Operator & Site ID# from the Grower
Maintain Use Records
Within 24 Hours of Application Submit Notice of Completion to Grower
Within 7 Days Submit Use Reports to CAC (site specific)
Use Report Must Include Operator & Site ID#
Within 30 Days Provide the Grower with 7-Day (Job) Use Report
County Agricultural Commissioner Responsibilities
Issue Operator & Site ID# to Growers
Compliance Monitoring
Grower Audits
Dealer Audits
PCO Audits
Review 7-Day (Job)/Monthly Use Reports
Return Incomplete Reports to Applicator
Submit Use Reports to DPR

* One operator ID# for each county farmed.

** The Dealer must obtain an operator ID# or write a statement on the invoice indicating that the purchaser was not required to obtain an operator identification number pursuant to Section 6622.

*** These reports are due before the 10th day of the month following the month of application.

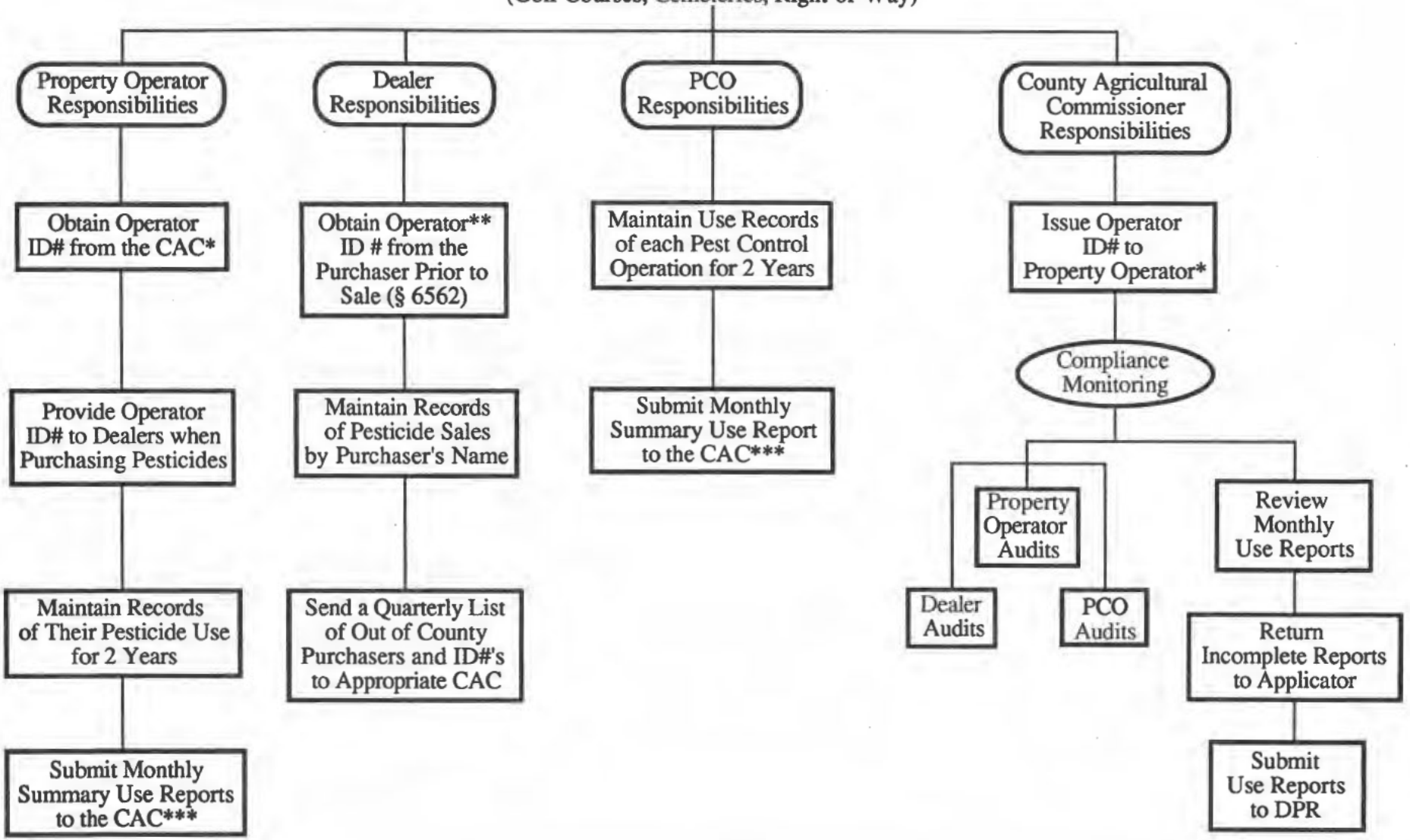
NOTE: Policy would allow pesticide applications on pastures, rangelands, and forests to be reported on the monthly summary use report form (#39-060).

Rev. 4/94

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY - DEPARTMENT OF PESTICIDE REGULATION
USE REPORTING SYSTEM

AGRICULTURAL USE: NON-PRODUCTION

(Golf Courses, Cemeteries, Right-of-Way)


Property Operator Responsibilities
Obtain Operator ID# from the CAC*
Provide Operator ID# to Dealers when Purchasing Pesticides
Maintain Records of Their Pesticide Use for 2 Years
Submit Monthly Summary Use Reports to the CAC***
Dealer Responsibilities
Obtain Operator** ID # from the Purchaser Prior to Sale (§ 6562)
Maintain Records of Pesticide Sales by Purchaser's Name
Send a Quarterly List of Out of County Purchasers and ID#'s to Appropriate CAC
PCO Responsibilities
Maintain Use Records of each Pest Control Operation for 2 Years
Submit Monthly Summary Use Report to the CAC***
County Agricultural Commissioner Responsibilities
Issue Operator ID# to Property Operator*
Compliance Monitoring
Property Operator Audits
Dealer Audits
PCO Audits
Review Monthly Use Reports
Return Incomplete Reports to Applicator
Submit Use Reports to DPR

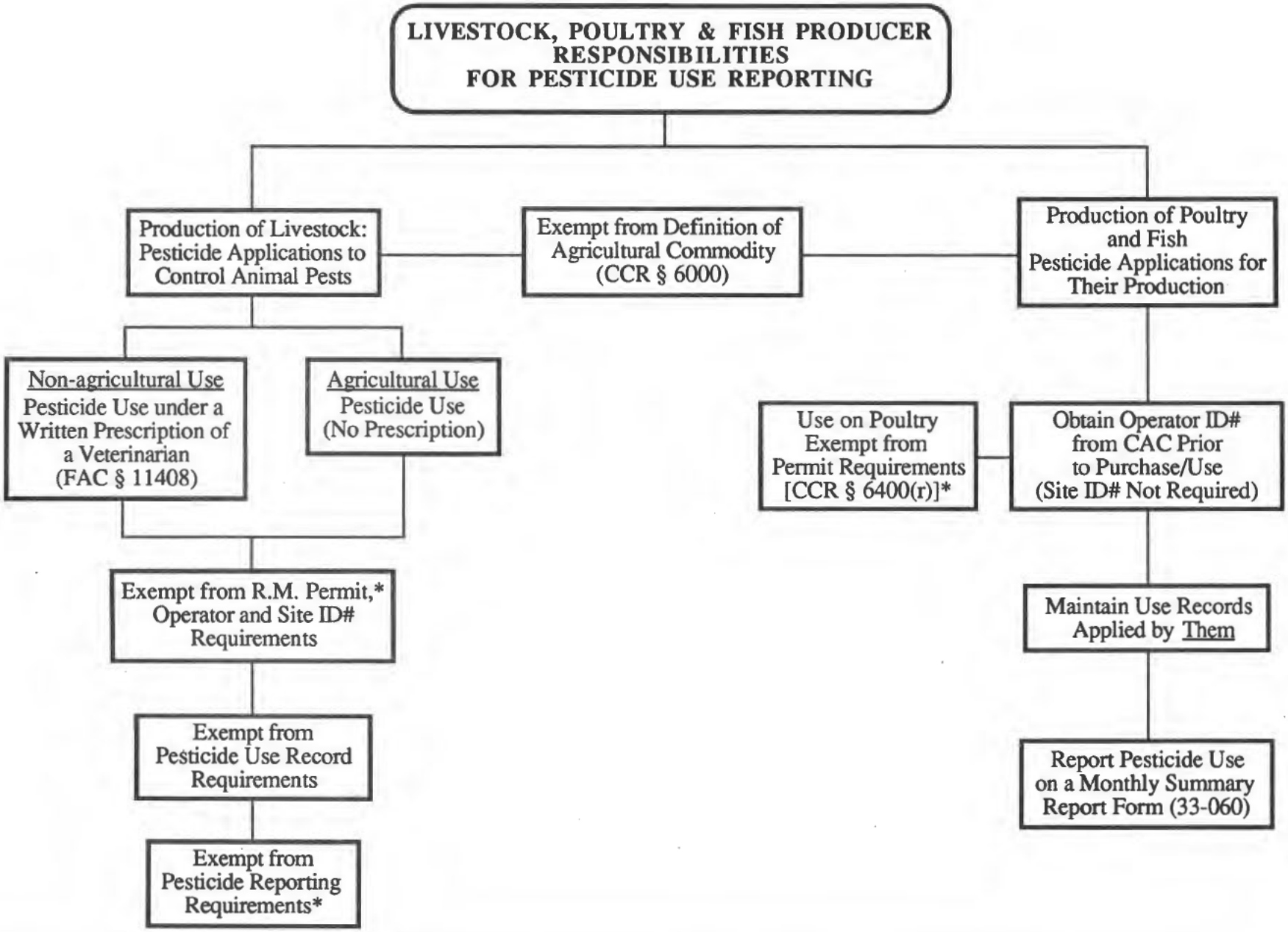
* The operator identification number is not required if the application was made by a person performing pest control for hire.

** The Dealer must obtain an operator ID# or write a statement on the invoice indicating that the purchaser was not required to obtain an operator identification number pursuant to Section 6622.

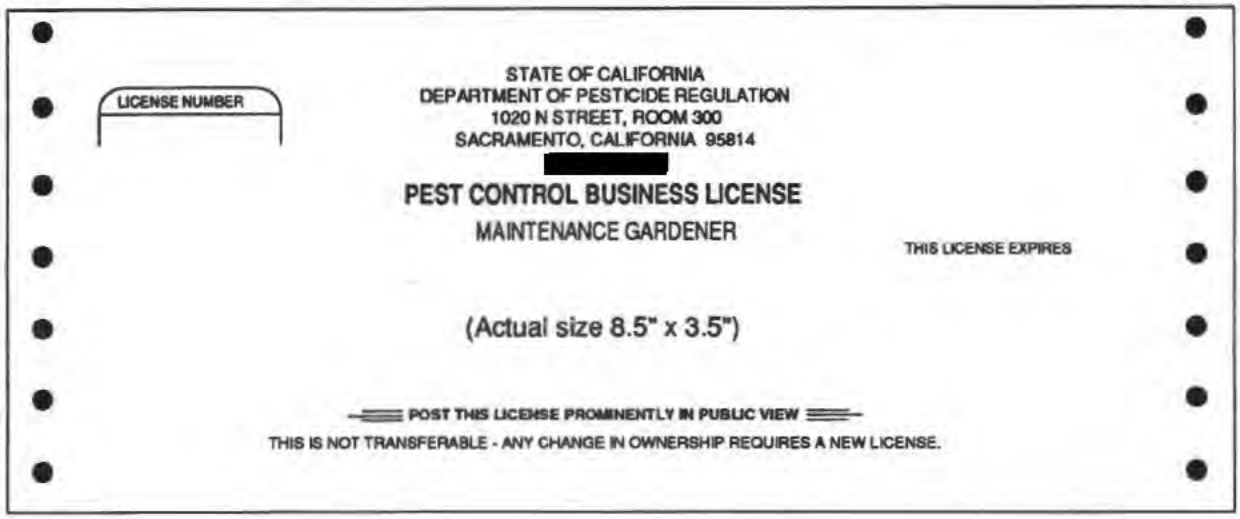
*** These reports are due before the 10th day of the month following the month of application.

4/92

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF PESTICIDE REGULATION


LIVESTOCK, POULTRY & FISH PRODUCER RESPONSIBILITIES FOR PESTICIDE USE REPORTING
Production of Livestock: Pesticide Applications to Control Animal Pests
Exempt from Definition of Agricultural Commodity (CCR § 6000)
Production of Poultry and Fish Pesticide Applications for Their Production
Non-agricultural Use Pesticide Use under a Written Prescription of a Veterinarian (FAC § 11408)
Agricultural Use Pesticide Use (No Prescription)
Use on Poultry Exempt from Permit Requirements [CCR § 6400(r)]*
Obtain Operator ID# from CAC Prior to Purchase/Use (Site ID# Not Required)
Exempt from R.M. Permit,* Operator and Site ID# Requirements
Maintain Use Records Applied by Them
Exempt from Pesticide Use Record Requirements
Report Pesticide Use on a Monthly Summary Report Form (33-060)
Exempt from Pesticide Reporting Requirements*

* Possession and use of federally restricted materials by private applicators is not exempted from permit and reporting requirements.


LICENSE NUMBER
STATE OF CALIFORNIA
DEPARTMENT OF PESTICIDE REGULATION
1020 N STREET, ROOM 300
SACRAMENTO, CALIFORNIA 95814
[redacted]
PEST CONTROL BUSINESS LICENSE
MAINTENANCE GARDENER
THIS LICENSE EXPIRES
(Actual size 8.5" x 3.5")
POST THIS LICENSE PROMINENTLY IN PUBLIC VIEW
THIS IS NOT TRANSFERABLE - ANY CHANGE IN OWNERSHIP REQUIRES A NEW LICENSE.

Who Needs It?

For persons who perform pest control for hire incidental to their business of maintenance gardening [FAC §11704(a)]. The incidental pest control is limited to ornamental and turf plantings indoors, in commercial parks, or surrounding structures [FAC §11701(b)].

Exemptions: Persons doing pest control incidental to new construction are not required to obtain this business license. This would include construction work such as paving parking lots or driveways, establishing new landscape, or building homes or other

What's Required?

- Have at least one person in a supervisory position who holds a valid QAC or QAL with the Landscape Maintenance Pest Control Category (Category B), at each location [FAC §11704(a)].
- Fulfill financial responsibility requirement [FAC §11702(c)(2) and CCR §6524].
- Fictitious Business Name Statement from the county clerks office [FAC §11702(a)].
- Certificate of Good Standing for companies that are corporations - obtained for a fee of $6.00 from the Secretary of State [FAC §11702(a)].
- License fee of $50.00 per year [FAC §11704(c)].

Additional Requirements!

- Register with the county agricultural commissioner (CAC) in each county where work is performed (FAC §11732).
- Retain records of pesticide use for two years (CCR §6624).
- Submit pesticide use report records to CAC (CCR §§6626 and 6627).
- Have valid permits for restricted pesticides used (CCR §6632).

References: FAC Sections 11403, 11701-11741 and CCR Sections 6520-6524

LICENSE NUMBER
STATE OF CALIFORNIA
DEPARTMENT OF PESTICIDE REGULATION
1020 N STREET, ROOM 300
SACRAMENTO, CALIFORNIA 95814
[redacted]
PEST CONTROL BUSINESS LICENSE
THIS LICENSE EXPIRES
(Actual size 8.5" x 3.5")
POST THIS LICENSE PROMINENTLY IN PUBLIC VIEW
THIS IS NOT TRANSFERABLE - ANY CHANGE IN OWNERSHIP REQUIRES A NEW LICENSE.

Who Needs It?

Any person who engages in pest control for hire. This includes, but is not limited to, the following types of activities (FAC §§11403, 11701):

- Ground and aerial pest control applications.
- Farm management companies when their services include pest control.
- Packing houses, shippers, storage facilities, and other processors who treat agricultural commodities owned by another person or firm (does not include
- COOPs).

Exemptions: structural pest control (FAC §11531); preservation treatment of fabrics or structural materials (FAC §11531); household or industrial sanitation services (FAC §11531); and tree surgery involving the removal of diseased or infested tissues or applying disinfectants to wound cavities incidental to tree surgery (FAC §11710).

What's Required?

- Have at least one person in a supervisory position who holds a QAL at each principal and branch location (FAC §11701.5).
- Fulfill financial responsibility requirement [FAC §11702(c)(2) and CCR §6524].
- Fictitious Business Name Statement from the County Clerk's Office [FAC §11702(a)].
- Certificate of Good Standing for companies that are corporations - obtained for a fee of $6.00 from the Secretary of State [FAC §11702(a)].
- License fee of $100.00 per year for the principal location and $50.00 per year for each branch location (FAC §11703).

Additional Requirements!

- Register with the county agricultural commissioner (CAC) in each county where work is performed (FAC §11732).
- Retain pest control application notification records (NOIs) for two years (CCR
- §6619).
- Retain records of pesticide use for two years (CCR §6624).
- Submit pesticide use report records to CAC (CCR §§6626 and 6627).
- Have valid permits for restricted pesticides used (CCR §6632).
- Written recommendations retained for one year (FAC §12004).
- Businesses that perform pest control using an aircraft must have a person who holds a valid Journeyman Pest Control Aircraft Certificate (FAC §11901).
- Federal Aviation Administration (FAA) Operating Certificate required to operate as a

References: FAC Sections 11403, 11701-11741 and CCR Sections 6520-6524

Structural Pest Control Board
Operator Information

For Additional Information, Please Contact:
STRUCTURAL PEST CONTROL BOARD
1422 HOWE AVENUE - SUITE 3
SACRAMENTO, CALIFORNIA 95825-3280
[redacted]

Structural Pest Control Board

STATE OF CALIFORNIA
DEPARTMENT OF
Consumer Affairs

ORIGINAL CERTIFICATE

Operator

(Actual Size 8.5" x 11")

Who Needs It?

Any person who is the qualifying manager of a registered structural pest control company or any individual who is to secure structural pest control work for hire, identify pest infestations or infections, conduct inspections and submit bids for or contract in behalf of a registered structural pest control company must be licensed by the Structural Pest Control Board (SPCB) as a structural pest control operator.

Exemptions: Public utilities operating under the regulations of the State Railroad Commission (with certain specified exceptions), persons engaged only in agricultural pest control work under permit or license by the Department of Pesticide Regulation or a county agricultural commissioner, pest control performed by persons on property owned, leased, or rented by them, governmental agencies, authorized representatives of an educational institution or state or federal agency engaged in research or study of pest control, or engaged in investigation or preparation for expert opinion or testimony if not on his/her own behalf, and certified architects and registered civil engineers acting within their professional capacity (BPC § 8555).

What's Required?

- Applicant must be a minimum of 18 years of age and possess the qualifications established by the SPCB, and pass the examination administered by the SPCB; must apply to the board for issuance of the operator's license within one year of passing the examination (BPC § 8561).
- Submit an application to the registrar containing a statement indicating the applicant is seeking the issuance of a structural pest control operator's license with the SPCB (BPC § 8562).
- Must be licensed by the SPCB as a structural pest control operator in one or any combination of the categories* of structural pest control (BPC § 8560).
- License fee of $150.00 (California Code of Regulations § 1948).

Additional Requirements!

- The applicant must provide proof of the minimum amount of actual experience (as an employee of a registered California company) in the particular branch(es)* of pest control he/she desires to be licensed (BPC § 8562).
- One-half of the required experience must be as a licensed field representative or the equivalent of such experience.
- Licenses expire every three years on June 30th. The renewal fee is $150.00.
- Upon renewal of an operator's license, the applicant must provide proof of completing the required continuing education hours or pass a continuing education examination. The continuing education examination fee is $25.00.

* Branch 1 - Fumigation
Branch 2 - General pest
Branch 3 - Termite
Wood Roof Cleaning and Treatment

References: California Code of Regulations §1948 and Business and Professions Code §8500 - 8697.5

Structural Pest Control Board
Field Representative Information

Appendix IV-7

For Additional Information, Please Contact:
STRUCTURAL PEST CONTROL BOARD
1422 HOWE AVENUE - SUITE 3
SACRAMENTO, CALIFORNIA 95825-3280
[redacted]

Structural Pest Control Board

STATE OF CALIFORNIA
DEPARTMENT OF
Consumer Affairs

ORIGINAL CERTIFICATE

Field Representative

(Actual Size 8.5" x 11")

Who Needs It?

Any person who is to secure structural pest control work for hire, identify pest infestations or infections, conduct inspections, and submit bids for or contract in behalf of a registered structural pest control company must be licensed by the Structural Pest Control Board (SPCB) as a structural pest control field representative (Business and Professions Code §8507).

The field representative must work only for a registered structural pest control company and may not work in his/her own behalf.

Exemptions: Public utilities operating under the regulations of the State Railroad Commission (with certain specified exceptions), persons engaged only in agricultural pest control work under permit or license by the Department of Pesticide Regulation or a county agricultural commissioner, pest control performed by persons on property owned, leased, or rented by them, governmental agencies, authorized representatives of an educational institution or state or federal agency engaged in research or study of pest control, or engaged in investigation or preparation for expert opinion or testimony if not on

What's Required?

- Must be a minimum of 18 years of age and possess the qualifications and pass the examination administered by the SPCB; must apply to the board for issuance of the field representative's license within one year from the date the applicant passed the examination (BPC §8563).
- Submit an application to the registrar containing a statement indicating the applicant is seeking the issuance of a field representative's license (BPC §8564).
- Pass a written examination adminstered by the SPCB in the category(ies)* the applicant is intending to be licensed (BPC §8566).
- Payment of a $30.00 license fee (California Code of Regulations §1948).

Additional Requirements!

- When applying for a field representative's license in a specific branch, the applicant must provide the board with proof of training and experience required in the specific branch(es) in which he/she is intending to be licensed (BPC §8564).
- The written examination will test the applicant's knowledge in the following areas: safety laws of California relating to the branch(es) of pest control for which the person is applying, chemicals used in pest control, the theory and practice of pest control in the branch(es) which the applicant is seeking the license, other state laws, including safety or health measures, or practices within the scope of structural pest control in the various branches, and the applicant's knowledge of the Business and Professions Code as related to structural pest control (BPC §8566).
- Upon renewal of the field representative's license, the applicant must pay a continuing education examination fee of $10.00 for each branch examination taken or pass the continuing education examination during each three year renewal period [CCR §1948(d)].

* Branch 1 - Fumigation
Branch 2 - General pest
Branch 3 - Termite
Wood Roof Cleaning and Treatment

 References: Business and Professions Code § 8500 - 8697.5 and California Code of Regulations § 1948

Structural Pest Control Board
Registered Structural Pest Control
Company Information

For Additional Information, Please Contact:
STRUCTURAL PEST CONTROL BOARD
1422 HOWE AVENUE - SUITE 3
SACRAMENTO, CALIFORNIA 95825-3280
[redacted]

Registered Structural Pest Control Company

Who Needs It?

Any structural pest control company who is to secure structural pest control work for hire, identify pest infestations or infections, conduct inspections and submit bids for or contract in behalf of a structural pest control company must be licensed by the Structural Pest Control Board (SPCB) as a registered structural pest control company.
Exemptions: Public utilities operating under the regulations of the State Railroad Commission (with certain specified exceptions), persons engaged only in agricultural pest control work under permit or license by the Department of Pesticide Regulation or a county agricultural commissioner, pest control performed by persons on property owned, leased, or rented by them, governmental agencies, authorized representatives of an educational institution or state or federal agency engaged in research or study of pest control, or engaged in investigation or preparation for expert opinion or testimony if not on his/her own behalf, and certified architects and registered civil engineers acting within their professional capacity
(Business and Professions Code § 8555).

What's Required?

- Applicant must be a minimum of 18 years of age and possess the qualifications established by the SPCB, and pass the examination administered by the SPCB; must apply to the board for issuance of the operator's license within one year of passing the examination (BPC § 8561).
- Must be licensed by the SPCB as a structural pest control operator in one or any combination of the categories* of structural pest control (BPC § 8560).
- Submit an application to the registrar containing a statement indicating the applicant is seeking the issuance of a structural pest control company registration certificate to the registrant.
- Registration fee of $120.00 (California Code of Regulations §1948).

Additional Requirements!

- The applicant must provide proof of the minimum amount of actual experience (as an employee of a registered California company) in the particular branch(es)* of pest control he/she desires to be licensed (BPC §8562).
- There must be a qualifying manager or managers for each branch of pest control in which the registered company is engaged in business (BPC § 8560).
- Each branch office must be registered with the SPCB (BPC § 8612).
- The branch office registration fee is $60.00. The registered company must designate a person licensed by the SPCB to supervise the branch office (BPC § 8611).

* Branch 1 - Fumigation
Branch 2 - General pest
Branch 3 - Termite
Wood Roof Cleaning and Treatment

References: California Code of Regulations §1948 and Business and Professions Code §8500 - 8697.5

Structural Pest Control Board
General Applicator Information

For Additional Information, Please Contact:
STRUCTURAL PEST CONTROL BOARD
1422 HOWE AVENUE - SUITE 3
SACRAMENTO, CALIFORNIA 95825-3280
[redacted]

Who Needs It?

Any unlicensed person performing pest control for hire and employed by a company engaged in the business of practicing structural pest control, and registered with the Structural Pest Control Board (SPCB) to conduct such business (Business and Professions Code §8564.5).

What's Required?

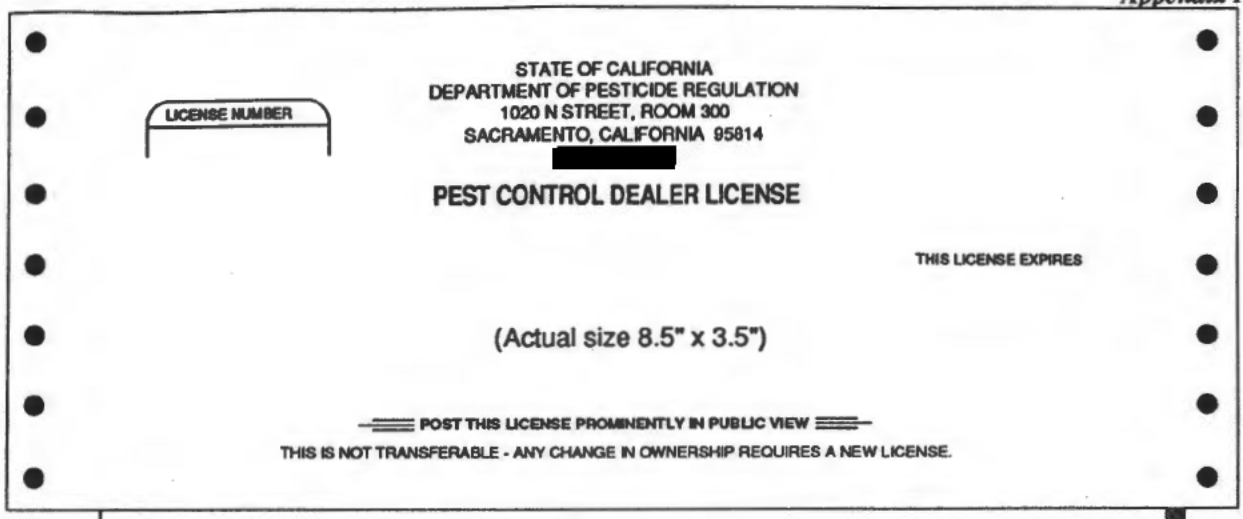
- Passing a written examination administered by the SPCB authorizing the person to apply any chemical substance in Branch 2 or 3* [BPC 8564.5(b)], or,
- Passing a written examination administered by the SPCB authorizing the person to apply any wood preservative, as part of a roof restoration process in wood roof cleaning and treatment [BPC §8564.5(d)].
- An examination fee of $10.00 per certification as an applicator for each category in which an examination is taken [California Code of Regulations §1948(b)].

Additional Information!

- For Branch 2 or 3, the examination will test the applicant's knowledge of pest control equipment, pest control application procedures, pesticide mixing and formulation, and pesticide label directions [BPC §8564.5(a)].
- For wood roof cleaning and treatment, the examination will test the applicant's knowledge of wood preservative application equipment, wood preservative application procedures, mixing and formulation, and wood preservative label directions [BPC §8564.5(d)].
- After passing the written examination in Branch 2 or 3, the person may apply any chemical for a period not to exceed three years, at which time the individual must again apply for and pass the written examination [BPC §8564.5(c)].
- Current law does not authorize a general applicator to apply any chemical substance in Branch 1 - Fumigation.
- This general applicator card is not the same as a certified applicator license!

* Branch 2 - General pest
Branch 3 - Termite
Wood Roof Cleaning and Treatment

References: Business and Professions Code §8500 - 8697.5 and California Code of Regulations §1948


LICENSE NUMBER
STATE OF CALIFORNIA
DEPARTMENT OF PESTICIDE REGULATION
1020 N STREET, ROOM 300
SACRAMENTO, CALIFORNIA 95814
[redacted]
PEST CONTROL DEALER LICENSE
THIS LICENSE EXPIRES
(Actual size 8.5" x 3.5")
POST THIS LICENSE PROMINENTLY IN PUBLIC VIEW
THIS IS NOT TRANSFERABLE - ANY CHANGE IN OWNERSHIP REQUIRES A NEW LICENSE.

Who Needs It?

- Pesticide retailers who sell agricultural use or dual use products to users [FAC §11407(a)].
- Those who sell any method or device for the control of agricultural pests, such as biological control agents, lures or insect trapping devices [FAC §11407(b)].
- Those who solicit sales of pesticides by making agricultural use recommendations through field representatives or other agents [FAC §11407(c)].
- Those who sell restricted materials to users [FAC §11407(d)].

What's Required to Obtain It?

- Each principal and branch location must have a person who is responsible for the operation of the dealership and holds a Designated Agent License, Agricultural Pest Control Adviser License, Pest Control Aircraft Pilot Certificate, or a Qualified Applicator License (CCR §6560).
- A Fictitious Business Name Statement from the county clerks office (FAC §12103).
- A Certificate of Good Standing for companies that are corporations - obtained for a fee of $6.00 from the Secretary of State (FAC §12103).
- A License fee of $100.00 per year for the principal office and $50.00 per year for each branch location (FAC §12103).

Additional Requirements when Licensed.

The Licensee Must:

- Retain at the principal place of business, records of purchases, sales, and distributions of economic poisons including those of its branch locations for four years (FAC §12115.3).
- Retain written recommendations for two years (CCR §6562).
- Retain permits for restricted materials for two years (CCR §6568).
- Retain statement of QAL/QAC number received from purchaser for two years. (CCR §6568).
- Retain Operators Identification Record for two years (CCR §6568).
- Retain Ground Water Protection Statement for two years (CCR §6570).
- Make quarterly reports to the Director on the sale of Ground Water Protection Pesticides. (CCR §6572).
- Report quarterly, the assessable sales (FAC §12115.3).
- Report annually, purchases from other than licensed pest control dealer or registrant.
- Indicate "California Mill Assesment was paid" or "California mill assessment of 22 mills was paid" on all sales invoices.

References: FAC Sections 11407, 11407.5, 12101-12123 and CCR Sections 6560-6574

STATE OF CALIFORNIA
DEPARTMENT OF PESTICIDE REGULATION

PEST CONTROL DEALER DESIGNATED AGENT LICENSE

LICENSE NUMBER VALID THROUGH

(SALMON COLORED CARD)

Who Needs It?

Any person who is responsible for supervising the operations of a licensed pest control dealer. Each licensed pest control dealer must maintain a designated agent at the principal office and an agent at each branch location (FAC §12106, CCR §6560).

Exemptions: If the responsible person is a licensed agricultural pest control adviser, qualified applicator licensee, or pest control aircraft pilot certificate holder, then that person would not have to be licensed as a designated agent.

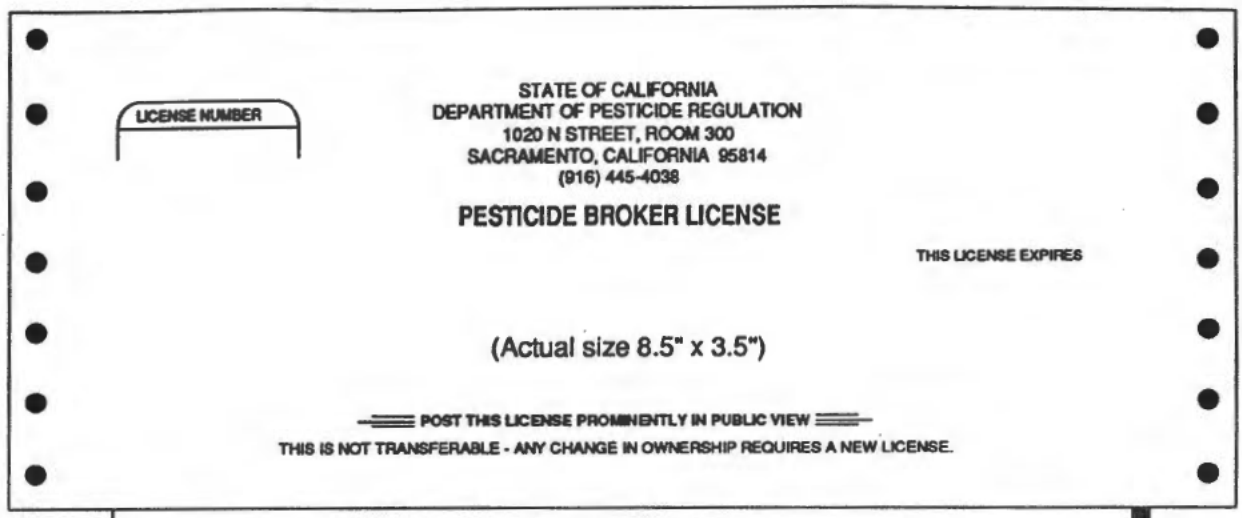
What's Required to Obtain the License?

- Submit a $15.00 application fee (FAC §12252).
- Passing a written examination on the sale and use of pesticides and pest control dealer responsibilities (FAC §12253).

Additional Requirements that the Agent Performs for His/Her Employer.

- Prepare and maintain for two years, records of all pesticides sold or delivered.
- Maintain a copy of each Operator Identification Number.
- When a pesticide is sold for agricultural use without a recommendation, the invoice or delivery slip must state that nonrecommendation has been made. The invoice or delivery slip must be provided to the customer or his agent at the time of delivery.
- Before the sale or delivery of a restricted material, the dealer must obtain a copy of the purchaser's restricted materials permit.
- Must maintain a copy for two years, of pesticides sold that are on the Ground Water Protection List.
- Send a list of the Operator Identification Numbers with corresponding names of persons purchasing pesticides during the quarter to each commissioner who issued the numbers. The dealer is not required to send the list to the commissioner of the county in which the dealer is located.

References: FAC Sections 12251 - 12258 and CCR Sections 6560 - 6574


LICENSE NUMBER
STATE OF CALIFORNIA
DEPARTMENT OF PESTICIDE REGULATION
1020 N STREET, ROOM 300
SACRAMENTO, CALIFORNIA 95814
(916) 445-4038
PESTICIDE BROKER LICENSE
THIS LICENSE EXPIRES
(Actual size 8.5" x 3.5")
POST THIS LICENSE PROMINENTLY IN PUBLIC VIEW
THIS IS NOT TRANSFERABLE - ANY CHANGE IN OWNERSHIP REQUIRES A NEW LICENSE.

Who Needs It?

- Any person, whether inside or outside of California, engaging in the sale or distribution of economic poisons labeled for agricultural use in California (except persons already licensed as a pest control dealer or a registrant selling his/her own registered product). All economic poisons offered for sale or sold in California must be registered by the Director of the Department of Pesticide Regulation (DPR).
- A Pest Control Dealer License is required if the sales are directly to end users.

Exemptions: Persons who operate only as sellers or distributors of California-registered economic poisons that are labeled only for nonagricultural use do not require a pesticide broker's license or pest control dealer's license.

What's Required to Obtain It?

- Have a pesticide broker license issued for each principal and branch location (FAC § 12848.1).
- Fictitious Business Name Statement from the county clerk's office.
- Certificate of Good Standing for companies that are California or foreign corporations registered in California - obtained for a fee of $6.00 from the Secretary of State. Corporations incorporated out-of-state must submit a Certificate of Good Standing from that state.
- License fee of $100.00 per year for the principal location and $50.00 per year for each branch location (FAC § 12848.1).

Additional Requirements When Licensed

- If the mill assessment has not been paid by the registrant, the pesticide broker or pest control dealer must pay quarterly to the Director of the Department of Pesticide Regulation, an assessment of 22 mills per dollar of sales, for sales into or within California, of registered economic poisons labeled for agricultural use. Also, the first person who sold this product into or within California must list by line item, the amount due to DPR.
- Retain records of all purchases, sales, and distribution of economic poisons for four years at the principal place of business (FAC § 12848.9).
- Submit a quarterly report to the director, the total dollars of sales and total pounds or gallons sold into or within California of economic poisons intended for agricultural use (FAC § 12848.9).

References: FAC Sections 12848 - 12999.4

Who Needs It?

A pilot certificate is required by anyone who operates any aircraft for the purpose of pest control. This includes any one of the following examples (FAC §§11901):

- Pilots employed by a licensed Pest Control Business.
- Pilots employed by vector control agencies or districts.
- Pilots who do pest control on their own property (private applicators).

What's Required?

Apprentice Pest Control Aircraft Pilot Certificate (AP):

- Valid FAA Commercial Pilot Certificate, or if spraying your own property, a valid FAA Private Pilot Certificate (FAC § 11910).
- Valid Medical Certificate (FAC § 11910).
- Submit an initial application fee of $30.00 (FAC §11903).
- Passing laws and regulations and the Apprentice Pilot Examinations (FAC §

Journeyman Pest Control Aircraft Pilot Certificate (JP):

- Valid FAA Commercial Pilot Certificate, or if spraying your own property, a valid FAA Private Pilot Certificate (FAC § 11910).
- Valid Medical Certificate (FAC § 11910).
- Within the last two years served as a California JP (FAC §11906) or AP for one year, and has at least 150 hours in a fixed wing aircraft or at least 50 hours in a helicopter (FAC § 11907).
- Submit an initial application fee of $30.00 (FAC §11903).
- Passing Journeyman Pilot Examination (FAC §11905).

Additional Requirements!

- Accumulate at least 20 hours of approved continuing education every two years before certificate renewal. Included in the 20 hours of continuing education are at least four hours pertaining to pesticide laws and regulations and at least four hours pertaining to aerial pest control equipment and application techniques (CCR §6511).
- Register with the county agricultural commissioner in each county where aerial pest control is performed (FAC § 11921).

References: FAC Sections 11701.5, 11704, 11901-11940 and CCR Sections 6000, 6000.2, 6540-6544

STATE OF CALIFORNIA
DEPARTMENT OF PESTICIDE REGULATION

AGRICULTURAL PEST CONTROL ADVISER LICENSE

	CATEGORIES SEE REVERSE
LICENSE NUMBER	VALID THROUGH

(GREEN COLORED CARD)

Who Needs It?

An APCA license is required by any person who offers a recommendation on any agricultural use, who holds himself or herself forth as an authority on any agricultural use, or who solicits services or sales for any agricultural use (FAC §§11410, 11411).

Exemptions: The following are exempted from this licensing requirement if the recommendation is put in writing (FAC §12001):

- Officials of federal, State, and county departments of agriculture.
- University of California personnel engaged in duties relating to agricultural use.

What's Required?

An APCA license is obtained by passing the Laws and Regulations examination and at least one category examination (for list of categories, refer to FAC §12022). In order to qualify for this examination, the applicant must meet the following requirements:

- Bachelors degree in agricultural sciences, biological science or pest management; or sixty semester units (90 quarter units) of college level curriculum in agricultural sciences, biological sciences or pest management, plus 24 months of technical experience as an assistant to an APCA or the equivalent experience. Both options include core course requirements of 39 semester units (58.5 quarter) (CCR §6550).
- Submit a copy of college transcripts with APCA application (CCR §6550).
- Submit initial application fee of $50.00 (FAC §12021).

Additional Requirements!

- Accumulate at least 40 hours of approved continuing education every two years before license renewal. Four of the 40 hours must cover the topic of pesticide and pest control laws and regulations (CCR §6511).
- Register with the county agricultural commissioner in "home" county (address on license) and in each county where recommendations are made (FAC §12031).
- Retain one copy of each written recommendation for one year following the date of such recommendation (FAC §12004).
- Provide the operator of the property with a copy of the written recommendation prior to the application (FAC §12003).
- Where a pesticide use is recommended, a copy of the written recommendation must be provided to the pesticide dealer and the applicator prior to application (FAC §12003).
- Must complete Ground Water Protection Training before writing Ground Water Protection Advisories [CCR §6416(b)].

References: FAC Sections 12001- 2036 and CCR Sections 6550-6557

9/89

Pest Control Recommendation

1. Operator of the Property	2. Recommendation Expiration Date
Address / City / County	
3. Location to be Treated	
4. Commodity to be Treated	5. Acres or Units to be Treated
6. Method of Application: ☐ Air ☐ Ground ☐ Fumigation ☐ Other _____	7. Pest(s) to be Controlled

8. Name of Pesticide(s)	Rate Per Acre or Unit	Dilution Rate	Volume Per Acre or Unit

9. Hazards and/or Restrictions:
- ☐ 1. Highly toxic to bees
- ☐ 2. Toxic to birds, fish and wildlife
- ☐ 3. Do not apply when irrigation or run-off is likely to occur
- ☐ 4. Do not apply near desirable plants
- ☐ 5. Do not allow to drift onto humans, animals or desirable plants
- ☐ 6. Keep out of lakes, streams and ponds
- ☐ 7. Birds feeding on treated area may be killed
- ☐ 8. Do not apply when foliage is wet (dew, rain, etc.)
- ☐ 9. May cause allergic reaction to some people
- ☐ 10. This product is corrosive and reacts with certain materials (see label)
- ☐ 11. Closed system required
- ☐ 12. Restricted use pesticide (California and/or EPA)
- ☐ 13. Hazardous area involved (see map and warnings)
- ☐ 14. Other (see attachment)

10. Schedule, Time or Conditions

11. Surrounding Crop Hazards

12. Proximity of Occupied Dwellings, People, Pets or Livestock

13. Non-Pesticide Pest Control, Warnings and Other Remarks

14. Criteria Used for Determining Need for Pest Control Treatment:
- ☐ Sweep Net Counts
- ☐ Leaf or Fruit Counts
- ☐ Preventative
- ☐ Field Observation
- ☐ Pheromone or Other Trap
- ☐ Soil Sampling
- ☐ History
- ☐ Other

15. Crop and Site Restrictions:
- ☐ 1. Worker reentry interval ____ days
- ☐ 2. Do not use within ____ days of harvest/slaughter
- ☐ 3. Posting required ☐ Yes ☐ No
- ☐ 4. Do not irrigate for at least ____ days after application
- ☐ 5. Do not apply more than ____ application(s) per season
- ☐ 6. Do not feed treated foliage or straw to livestock
- ☐ 7. Plantback restrictions (see label)
- ☐ 8. Other (see attachment)

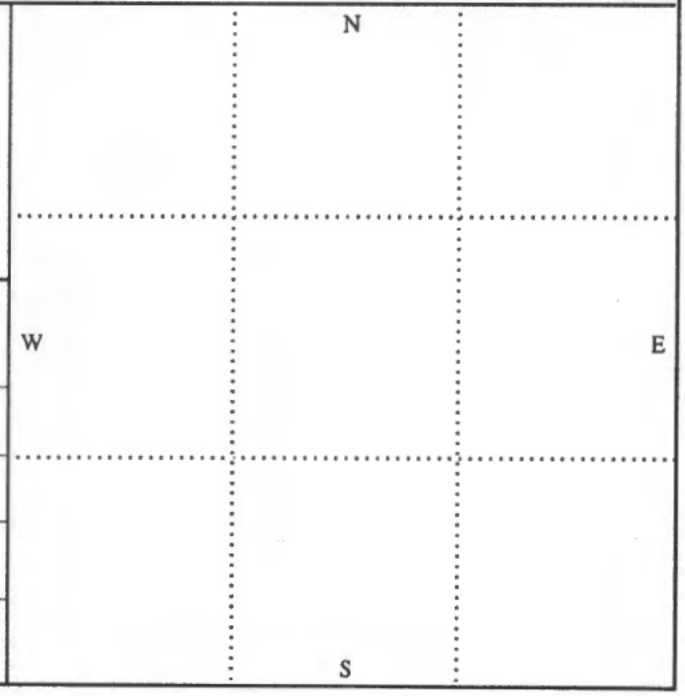
16. I certify that alternatives and mitigation measures that would substantially lessen any significant adverse impact on the environment have been considered and, if feasible, adopted.

Adviser Signature / Date

Adviser License Number

Employer

Employers Address



Explanation and Instructions for Completing the Written Recommendation

1. Include the name and address of the grower, agency or firm for whom the recommendation is written.
2. Include the date the recommendation expires.
3. Provide information on how to locate the property or site to be treated.
4. Indicate the commodity, crop or site to be treated.
5. Indicate the total acres or units to be treated.
6. Check the box adjacent to the method of application.
7. Identify the pest or pests to be controlled by recognized common name.
8. Name of the pesticide (common name or trade name), dosage rate per acre or other units, dilution rate and volume per acre.
9. Check the box adjacent to the applicable hazard(s) and/or restriction(s).
10. Indicate the schedule, time or conditions for the application in relation to temperature, time of day, irrigation, etc. Also, include any label restrictions on use or disposition of crop or crop by-product.
11. Indicate any surrounding crops that may be sensitive to the recommended treatment.
12. Identify any occupied dwellings, fieldworkers, pets or livestock in the proximity of the treatment area.
13. Indicate any non-pesticide substance, pest control method or device that will be used to control the pest(s). The recommendation should include a warning of the possibility of damages by the pesticide application that reasonably should have been known by the agricultural pest control adviser to exist.
14. Check the box adjacent to the criteria used for determining need for pest control treatment.
15. Check the box adjacent to the applicable crop and site restrictions.
16. Signature of the licensed pest control adviser or person acting in the capacity of a pest control adviser in accordance with the licensing exemption under Section 12001 of the California Food and Agricultural Code, the date the recommendation was made, and if applicable, the adviser's license number. Also, include the name and address of the adviser's employer.

Map - Sketch the property or site to be treated and any surrounding hazards that are known to exist.

STATE OF CALIFORNIA

CONTINUING EDUCATION RECORD RENEWAL SUMMARY (AGRICULTURAL PEST CONTROL ADVISER PROGRAM)

PR-ENF-123A (REV. 9/95)

Appendix IV-16

DEPARTMENT OF PESTICIDE REGULATION
PESTICIDE ENFORCEMENT BRANCH
LICENSING AND CERTIFICATION PROGRAM
1020 N STREET, ROOM 300
SACRAMENTO, CALIFORNIA 95814-5624

GENERAL INFORMATION [redacted]
FAX

INSTRUCTIONS

1. For each approved course you have taken, enter the following: (a) title; (b) I.D. code number; (c) location; (d) date(s) attended; and (e) hours completed. In the shaded boxes in the lower right hand corner at the bottom of the next page, enter the total number of hours you have completed for the current renewal period. If you are using the CECPM (Continuing Education Center for Pest Management) printout as proof of continuing education, you do not need to return this form; however, you must sign the CECPM printout and sumbit with your renewal application. If the information on this form or the CECPM printout is incomplete, the processing of your renewal application will be delayed.

2. If you want to receive credit for a course offered by an accredited college or university, on a separate sheet of paper include the following information: the accredited institution, the course instructor's name, the total hours you attended, a brief summary of the course topic, and a copy of your grade report or transcript listing the course or a verification of attendance signed by the instructor.

3. Please do not submit application and fee unless continuing education hours have been completed. If you fail to renew your license on or before December 31 of the expiration year because of insufficient continuing education hours, you have until the following December 31, to accumulate and submit the required hours to renew your license. Your license will not be valid until all renewal requirements are met. A $10 penalty will be charged for all late renewals.

APPLICANT NAME

ADVISER LICENSE NUMBER

CONTINUING EDUCATION COURSE INFORMATION

COURSE HOURS

		Laws and Regulations (L) ⬇	Aerial Application and Techniques (A) ⬇	Ground Application and Techniques (G) ⬇	Other (O) ⬇	Total Course Hours (T) ⬇
1. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
2. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
3. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
4. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
5. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
6. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
7. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
8. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
9. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
	Total Renewal Hours ➡					

CONTINUING EDUCATION COURSE INFORMATION (Continued)		COURSE HOURS				
10. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
11. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
12. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
13. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
14. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
15. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
16. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
17. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
18. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
19. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
20. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
21. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
22. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
23. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
	Total Renewal Hours ➡					

STATE OF CALIFORNIA

CONTINUING EDUCATION RECORD RENEWAL SUMMARY (QUALIFIED APPLICATOR LICENSE PROGRAM)

PR-ENF-123B (REV. 9/95)

Appendix IV-16

DEPARTMENT OF PESTICIDE REGULATION
PESTICIDE ENFORCEMENT BRANCH
LICENSING AND CERTIFICATION PROGRAM
1020 N STREET, ROOM 300
SACRAMENTO, CALIFORNIA 95814-5624
GENERAL INFORMATION [redacted]
FAX [redacted]

INSTRUCTIONS

1. For each approved course you have taken, enter the following: (a) title; (b) I.D. code number; (c) location; (d) date(s) attended; and (e) hours completed. In the shaded boxes in the lower right hand corner at the bottom of the next page, enter the total number of hours you have completed for the current renewal period. If you are using the CECPM (Continuing Education Center for Pest Management) printout as proof of continuing education, you do not need to return this form; however, you must sign the CECPM printout and sumbit with your renewal application. If the information on this form or the CECPM printout is incomplete, the processing of your renewal application will be delayed.

2. If you want to receive credit for a course offered by an accredited college or university, on a separate sheet of paper include the following information: the accredited institution, the course instructor's name, the total hours you attended, a brief summary of the course topic, and a copy of your grade report or transcript listing the course or a verification of attendance signed by the instructor.

3. Please do not submit application and fee unless continuing education hours have been completed. If you fail to renew your license on or before December 31 of the expiration year because of insufficient continuing education hours, you have until the following December 31, to accumulate and submit the required hours to renew your license. Your license will not be valid until all renewal requirements are met. A $10 penalty will be charged for all late renewals.

APPLICANT NAME	LICENSE TYPE	LICENSE NUMBER

CONTINUING EDUCATION COURSE INFORMATION

		COURSE HOURS				
		Laws and Regulations (L) ⬇	Aerial Application and Techniques (A) ⬇	Ground Application and Techniques (G) ⬇	Other (O) ⬇	Total Course Hours (T) ⬇
1. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
2. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
3. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
4. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
5. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
6. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
7. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
8. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
9. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
	Total Renewal Hours ➡					

STATE OF CALIFORNIA

CONTINUING EDUCATION RECORD RENEWAL SUMMARY (QUALIFIED APPLICATOR CERTIFICATE PROGRAM)

Appendix IV-16

PR-ENF-123C (REV. 9/95)

DEPARTMENT OF PESTICIDE REGULATION
PESTICIDE ENFORCEMENT BRANCH
LICENSING AND CERTIFICATION PROGRAM
1020 N STREET, ROOM 300
SACRAMENTO, CALIFORNIA 95814-5624
GENERAL INFORMATION [redacted]
FAX (916) 445-4

INSTRUCTIONS

1. For each approved course you have taken, enter the following: (a) title; (b) I.D. code number; (c) location; (d) date(s) attended; and (e) hours completed. In the shaded boxes in the lower right hand corner at the bottom of the next page, enter the total number of hours you have completed for the current renewal period. If you are using the CECPM (Continuing Education Center for Pest Management) printout as proof of continuing education, you do not need to return this form; however, you must sign the CECPM printout and sumbit with your renewal application. If the information on this form or the CECPM printout is incomplete, the processing of your renewal application will be delayed.

2. If you want to receive credit for a course offered by an accredited college or university, on a separate sheet of paper include the following information: the accredited institution, the course instructor's name, the total hours you attended, a brief summary of the course topic, and a copy of your grade report or transcript listing the course or a verification of attendance signed by the instructor.

3. Please do not submit application and fees unless continuing education hours have been completed. If you fail to renew your certificate on or before December 31 of the expiration year because of insufficient continuing education hours, you have until the following December 31 to accumulate and submit the required hours to renew your certificate. Your certificate will not be valid until all renewal requirements are met. A $10 penalty will be charged for all late renewals.

APPLICANT NAME	CERTIFICATE TYPE	CERTIFICATE NUMBER

CONTINUING EDUCATION COURSE INFORMATION

COURSE HOURS

		Laws and Regulations (L) ⬇	Aerial Application and Techniques (A) ⬇	Ground Application and Techniques (G) ⬇	Other (O) ⬇	Total Course Hours (T) ⬇
1. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
2. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
3. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
4. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
5. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
6. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
7. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
8. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
9. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
	Total Renewal Hours ➡					

STATE OF CALIFORNIA

CONTINUING EDUCATION RECORD RENEWAL SUMMARY (AIRCRAFT PILOT PEST CONTROL CERTIFICATE PROGRAM)

Appendix IV-16

PR-ENF-123D (REV. 9/95)

DEPARTMENT OF PESTICIDE REGULATION
PESTICIDE ENFORCEMENT BRANCH
LICENSING AND CERTIFICATION PROGRAM
1020 N STREET, ROOM 300
SACRAMENTO, CALIFORNIA 95814-5624
(916) 445-4026
GENERAL INFORMATION
FAX [redacted]

INSTRUCTIONS

1. For each approved course you have taken, enter the following: (a) title; (b) I.D. code number; (c) location; (d) date(s) attended; and (e) hours completed. In the shaded boxes in the lower right hand corner at the bottom of the next page, enter the total number of hours you have completed for the current renewal period. If you are using the CECPM (Continuing Education Center for Pest Management) printout as proof of continuing education, you do not need to return this form; however, you must sign the CECPM printout and sumbit with your renewal application. If the information on this form or the CECPM printout is incomplete, the processing of your renewal application will be delayed.

2. If you want to receive credit for a course offered by an accredited college or university, on a separate sheet of paper include the following information: the accredited institution, the course instructor's name, the total hours you attended, a brief summary of the course topic, and a copy of your grade report or transcript listing the course or a verification of attendance signed by the instructor.

3. Please do not submit application and fees unless continuing education hours have been completed. If you fail to renew your certificate on or before December 31 of the expiration year because of insufficient continuing education hours, you have until the following December 31 to accumulate and submit the required hours to renew your certificate. Your certificate will not be valid until all renewal requirements are met. A $10 penalty will be charged for all late renewals.

APPLICANT NAME	CERTIFICATE TYPE	CERTIFICATE NUMBER

CONTINUING EDUCATION COURSE INFORMATION

		COURSE HOURS				
		Laws and Regulations (L) ⬇	Aerial Application and Techniques (A) ⬇	Ground Application and Techniques (G) ⬇	Other (O) ⬇	Total Course Hours (T) ⬇
1. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
2. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
3. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
4. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
5. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
6. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
7. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
8. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
9. COURSE/SEMINAR/CONFERENCE TITLE	I.D. CODE NUMBER	(L)	(A)	(G)	(O)	(T)
LOCATION *(City and State)*	DATE(S) ATTENDED					
	Total Renewal Hours ➡					

STATE OF CALIFORNIA

ADVISER AND APPLICATOR CONTINUING EDUCATION REQUIREMENT SUMMARY

(REV. 10/94)

DEPARTMENT OF PESTICIDE REGULATION
PESTICIDE ENFORCEMENT BRANCH
LICENSING AND CERTIFICATION PROGRAM
1020 N STREET, ROOM 300
SACRAMENTO, CALIFORNIA 95814-5624
[redacted]

A. Adviser and Applicator Continuing Education Hours Summary

License & Certificate Type	*Laws & Regulations Hours*	*Application Equipment & Technique Hours*	*Other Hours(1)*	*Total Hours(2)*
Pest Control Aircraft Pilot's Certificate (Apprentice & Journeyman)	4	4	12	20
Qualified Applicator Certificate & License	4		16	20
Agricultural Pest Control Adviser License	4		36	40
Qualified Applicator Certificate & License(3) (Possessing only Category B AND currently possessing a valid Maintenance Gardener Pest Control Business License.)	2		6	8
Qualified Applicator Certificate & License(4) (Possessing only Category H)	2		2	4

(1) Other hours include, but are not limited to, the following topics: laws and regulations, chemical formulation, labeling and label interpretation, application equipment, pests, identification of environmentally sensitive areas, drift prevention, pesticide registration, integrated pest management, cultural practices, pesticide worker safety, ground water protection, and biological control methods.

(2) Total hours required every 2-year renewal period.

(3) This includes Qualified Applicators who have only the Landscape Maintenance Pest Control Category (Category B) and currently possess a valid Maintenance Gardener Pest Control Business License.

(4) This includes Qualified Applicators who have only the Seed Treatment Pest Control Category (Category H).

B. Continuing Education Hours Required for New Adviser and Applicator

Number of Months License or Certificate Valid Before Renewal	*Adviser Hours*	*Applicator Hours*		
Less than 12 Months	0	0	0	0
12 to 20 Months	20*	2*①	4*②	10*③
21 to 24 Months	40	4①	8②	20③

* The laws and regulations hours, and application equipment and technique hours if applicable, are reduced by one-half the required amount stated in A above.

① Qualified Applicator possessing only Category H. ② Qualified Applicators possessing only Category B and currently possess a valid Maintenance Gardener Pest Control Business License. ③ All other Qualified Applicators.

C. Adviser and Applicator Renewals

Renewal Dates	*Adviser's Last Name Initial*		*Applicator's Last Name Initial*	
	A through L	*M through Z*	*A through L*	*M through Z*
Even-numbered Years	*December 1996, 1998, 2000, etc.*		*December 1996, 1998, 2000, etc.*	
Odd-numbered Years		*December 1995, 1997, 1999, etc.*		*December 1995, 1997, 1999, etc.*

Material Safety Data Sheets Collection:

Sheet No. 28
Antimony Trioxide
Issued: 12/81 Revision: C, 5/93

Section 1. Material Identification

41

Antimony Trioxide (Sb_2O_3) Description: Derived by heating antimony ore and recondensing the fumes, adding ammonium hydroxide to antimony chloride, or direct extraction from low-grade ores. Used in fire retarding of textiles, paper, and plastics (chiefly PVC); paint pigments; high stability specialty lubricants; phosphors; as a ceramic opacifier; catalyst; mordant; glass decolorizer; and chemical intermediate.
Other Designations: CAS No. 1309-64-4, antimonious oxide, antimony peroxide, antimony sesquioxide, antimony white, Antox, C.I. Pigment White II, Dechlorane-A-O, diantimony trioxide, Exitelite, flowers of antimony, Senarmontite, Valentinite, White Star.
Manufacturer: Contact your supplier or distributor. Consult latest *Chemical Week Buyers' Guide*[73] for a suppliers list.

powder

R	1
I	3
S	2
K	2

HMIS
H 2*
F 1
R 0

Genium

cubes

R	1
I	3
S	2
K	0

HMIS
H 2*
F 0
R 0

* Chronic effects

PPE† † Sec. 8

Cautions: Antimony trioxide is an eye, skin, and mucous membrane irritant and is considered a suspected human carcinogen. The powder form will ignite and burn in air when heated.

Section 2. Ingredients and Occupational Exposure Limits

Antimony trioxide, < 100%. Impurities include arsenic.

1992 OSHA PEL
Transitional & Final Rule Limits
8-hr TWA: 0.5 mg/m³ (as Sb)

1990 IDLH Level
80 mg/m³ (as Sb)

1992 NIOSH REL
TWA: 0.5 mg/m³ (as Sb)

1993-94 ACGIH TLV
TWA: 0.5 mg/m³ (handling and use, as Sb)

1991 DFG (Germany) MAK
TWA: 0.5 mg/m³ (as Sb)
Category III: Substances with systemic effects
Onset of effects; > 2 hr
Half life: > shift length (strongly cumulative)
Peak Exposure limit: 5 mg/m³, 30 min. average value, 1/shift

1992 Toxicity Data*
Rat, inhalation, TC_{Lo}: 4200 µg/m³ given intermittently for 52 weeks caused liver and lung tumors.
Rat, oral, LD_{50}: > 20 g/kg
Rat, inhalation, TC_{Lo}: 270 µg/m³ from 1 to 21 days of pregnancy caused post-implantation mortality or fetal death.

* See NIOSH, *RTECS* (CC5650000), for additional mutation, reproductive, tumorigenic, and toxicity data.

Section 3. Physical Data

Boiling Point: 843.3 °F (1550 °C), *sublimes**
Melting Point: 346.1 °F (655 °C)
Vapor Pressure: 1 mm Hg at 574 °F (1065.2 °C)
pH: Amphoteric (can react as an acid or a base)
Molecular Weight: 291.5
Density: 5.2
Water Solubility: Insoluble; 0.000029 mole/1000 g water at 77 °F (25 °C).
Other Solubilities: Soluble in sulfuric, hydrochloric, and nitric acids; potassium hydroxide; warm tartaric acid; bitartrates; alkali hydroxides and sulfides.

Appearance and Odor: White, odorless, crystalline powder or cubes.
* Sublimes in high vacuum at 752 °F (400 °C)

Section 4. Fire and Explosion Data

Flash Point: None reported	Autoignition Temperature: None reported	LEL: None reported	UEL: None reported

Extinguishing Media: The powder ignites and burns when heated; the cubes don't. Use dry chemical, carbon dioxide, water, or regular foam.
Unusual Fire or Explosion Hazards: The more finely divided the powder, the more readily it burns.
Special Fire-fighting Procedures: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode. Do not release runoff from fire control methods to sewers or waterways; dike for proper disposal.

Section 5. Reactivity Data

Stability/Polymerization: Antimony trioxide is stable at room temperature in closed containers under normal storage and handling conditions. Hazardous polymerization cannot occur.
Chemical Incompatibilities: Include chlorinated rubber (at 420.8 °F/216 °C), bromine trifluoride, acids, oxidizers, and halogenated agents.
Conditions to Avoid: Excessive dust generation, exposure to heat or ignition sources, and contact with incompatibles.
Hazardous Products of Decomposition: Thermal oxidative decomposition of antimony trioxide can produce toxic antimony fumes.

Section 6. Health Hazard Data

Carcinogenicity: The ACGIH, TLV-A2 (suspected human carcinogen for Sb_2O_3 *production*)[183] and DFG, MAK-A2 (unmistakably carcinogenic animals only, Sb_2O_3 *handling and use*),[183] list antimony trioxide as a carcinogen.
Summary of Risks: Antimony trioxide is irritating to the eyes, skin, and respiratory tract. Chronic exposure appears to be more of a threat than acute exposure and is evident by heart disease, "antimony measles", and possible carcinogenicity. Liver and kidney damage is seen in animals but it is not clear if the same damage could occur in humans. Due to its insolubility in water, antimony trioxide is less toxic than soluble antimony salts. In addition, it is three times less toxic than the metal.
Medical Conditions Aggravated by Long-Term Exposure: Skin, heart, and lung disorders.
Target Organs: Eyes, skin, and the respiratory and cardiovascular systems.
Primary ntry Routes: Inhalation, skin and eye contact, ingestion.

Continue on next page

Section 6. Health Hazard Data, *continued*

Acute Effects: Inhalation can cause sore throat, headache, chest pain, shortness of breath, metallic taste, nausea and vomiting, diarrhea, and weight loss. Skin contact is irritating. Eye contact is irritating and can cause conjunctivitis. Ingestion causes irritation of the gastrointestinal tract, vomiting, bloody stools, slow pulse and low blood pressure, shallow breathing, and possibly, coma and convulsions resulting in death.
Chronic Effects: Chronic inhalation can cause inflammation of the respiratory tract resembling simple pneumoconiosis and is shown by radiographic lung changes (studied individuals were exposed up to 10 X the TLV). Lung cancer is possible based on an English epidemiologic study but at present, Sb_2O_3 only has status as a suspected carcinogen. There is also evidence of chronic heart disease due to effects on the heart muscle. Repeated or prolonged skin contact may cause "antimony measles ", consisting of itchy papules and pustules around the sweat and fat glands. This is particularly seen in moist areas (elbows, underarms, groin area, etc.). The condition appears to be more prevalent when temperatures are high.
FIRST AID
Eyes: *Do not* allow victim to rub or keep eyes tightly shut. Gently lift eyelids and flush immediately and continuously with flooding amounts of water until transported to an emergency medical facility. Consult a physician immediately.
Skin: *Quickly* remove contaminated clothing. Rinse with flooding amounts of water to remove any loose material, then wash with soap and water. For reddened or blistered skin, consult a physician.
Inhalation: Remove exposed person to fresh air and support breathing as needed.
Ingestion: Never give anything by mouth to an unconscious or convulsing person. Contact a poison control center. Unless otherwise advised, have that *conscious and alert* person drink 1 to 2 glasses of water, then induce vomiting.
After first aid, get appropriate in-plant, paramedic, or community medical support.
Note to Physicians: Support respiratory and cardiovascular function. A urine test can be used to confirm exposure-1 mg/L is indicative of potentially harmful exposure. Chelators such as BAL and unithiol have been used in some countries.

Section 7. Spill, Leak, and Disposal Procedures

Spill/Leak: Notify safety personnel, isolate and ventilate area, deny entry, and stay upwind. Shut off ignition sources. Cleanup personnel should protect against inhalation and skin/eye contact. Avoid dust generation; do not sweep. Carefully scoop spills into suitable containers for disposal. Damp mop any residue. Vacuuming (with an appropriate filter) may also be used. Prevent entry into sewers, drains, and waterways. Follow applicable OSHA regulations (29 CFR 1910.120).
Environmental Transport: Antimony trioxide is not expected to volatilize from water because of its low vapor pressure.
Ecotoxicity Values: *Lepomis macrochirus* (bluegill sunfish), LD_{50} = > 530 mg/L/96 hr; *Pimephales promelas* (fathead minnow), LD_{50} = > 833 mg/L/96 hr.
Disposal: Consider returning large amounts to a smelter for reprocessing. Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.
EPA Designations
RCRA Hazardous Waste (40 CFR 261.33): Not listed
Listed as a CERCLA Hazardous Substance* (40 CFR 302.4): Final Reportable Quantity (RQ), 1000 lb (454 kg) [* per CWA, Sec. 311 (b)(4)]
SARA Extremely Hazardous Substance (40 CFR 355): Not listed
SARA Toxic Chemical (40 CFR 372.65): Not listed
OSHA Designations
Listed (as Sb) as an Air Contaminant (29 CFR 1910.1000, Table Z-1-A)

Section 8. Special Protection Data

Goggles: Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Because contact lens use in industry is controversial, establish your own policy. **Respirator:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Consider the NIOSH respirator recommendations for antimony dust because there are no specific recommendations for antimony trioxide. For emergency or nonroutine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas. **Other:** Wear chemically protective gloves, boots, aprons, and gauntlets to prevent skin contact. Butyl rubber and polycarbonate are suitable materials. **Ventilation:** Provide general and local exhaust ventilation systems to maintain airborne concentrations below the OSHA PEL (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.[103] **Safety Stations:** Make available in the work area emergency eyewash stations, safety/quick-drench showers, and washing facilities. **Contaminated Equipment:** Separate contaminated work clothes from street clothes and launder before reuse. Remove Sb_2O_3 from your shoes and clean PPE. **Comments:** Never eat, drink, or smoke in work areas. Practice good personal hygiene after using Sb_2O_3, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9. Special Precautions and Comments

Storage/Handling Requirements: Prevent physical damage to containers. Store in a cool, dry, well-ventilated area away from incompatibles.
Engineering Controls: To reduce potential health hazards, use sufficient dilution or local exhaust ventilation to control airborne contaminants and to maintain concentrations at the lowest practical level.
Administrative Controls: Consider preplacement and periodic medical exams of exposed workers with emphasis on the skin, lungs, and heart.

Transportation Data (49 CFR 172.101)

DOT Shipping Name: Antimony compounds, inorganic, solid, n.o.s.
DOT Hazard Class: 6.1
ID No.: UN1549
DOT Packing Group: III
DOT Label: Keep away from food
Special Provisions (172.102):—

Packaging Authorizations
a) **Exceptions:** 173.153
b) **Non-bulk Packaging:** 173.213
c) **Bulk Packaging:** 173.240

Quantity Limitations
a) **Passenger Aircraft or Railcar:** 100 kg
b) **Cargo Aircraft Only:** 200 kg

Vessel Stowage Requirements
a) **Vessel Stowage:** A
b) **Other:** —

MSDS Collection **References:** 1, 26, 73, 101, 103, 124, 126, 127, 132, 133, 136, 139, 159, 167, 168, 176, 183, 186
Prepared by: M Gannon, BA; **Industrial Hygiene Review:** PA Roy, MPH, CIH; **Medical Review:** T Thoburn, MPH, MD

EMPLOYEE PESTICIDE SAFETY TRAINING RECORD

EMPLOYEE NAME:	EMPLOYEE'S SIGNATURE:	DATE:
EMPLOYER NAME:	EMPLOYER'S SIGNATURE:	
TRAINER NAME:	TRAINER'S SIGNATURE:	

☐ APPLICATOR ☐ FLAGGER

☐ MIXER/LOADER ☐ OTHER (SPECIFY) _____

IMPORTANT:

1. Training must be given before employees are allowed to handle any pesticide, continually updated to cover any new pesticides that will be handled, and repeated and documented at least annually thereafter.

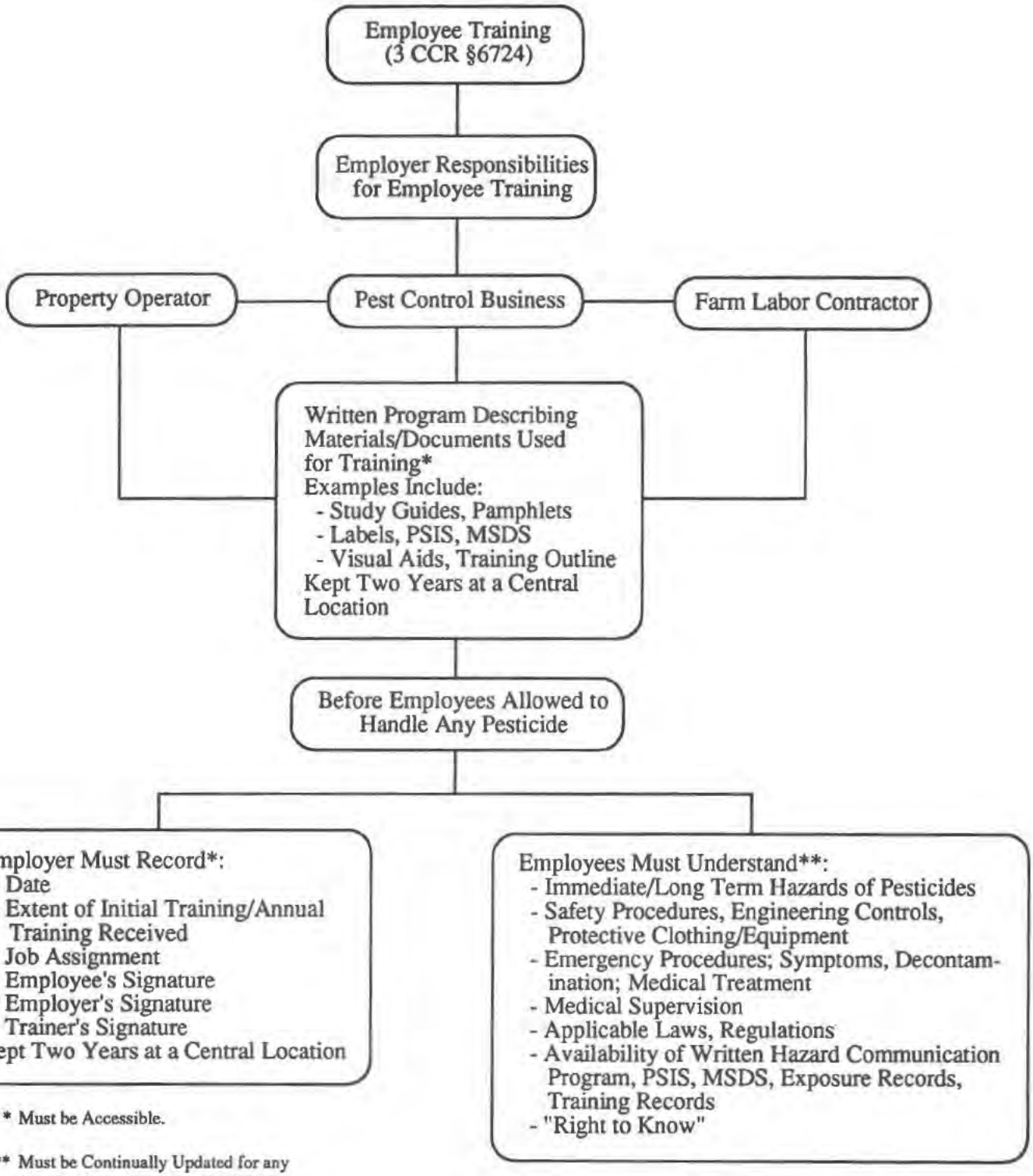
2. Training record must be retained for two years at a central location at the workplace accessible to the employee.

	PESTICIDE NAME																		
1.	**IMMEDIATE AND LONG TERM HAZARDS** involved, including hazards associated with exposure to pesticides known or suspected of chronic effects such as, tumors, cancer, birth defects, etc.																		
2.	**SAFETY PROCEDURES** to be followed while mixing, loading, applying pesticides, or servicing contaminated equipment.																		
3.	**ENGINEERING CONTROLS:** When and how to use enclosed cabs, closed mixing/loading systems.																		
4.	**PROTECTIVE CLOTHING AND EQUIPMENT:** Proper use and care of coveralls, gloves, goggles, boots, apron, rainsuit, respiratory equipment.																		
5.	**EMERGENCY PROCEDURES** to be followed for handling non-routine tasks or emergency situations.																		
6.	**WAYS POISONING OR INJURY CAN OCCUR** through ingestion, inhalation, or dermal routes.																		
7.	**IMPORTANCE OF IMMEDIATE DECONTAMINATION OF SKIN AND EYES** when exposure occurs.																		
8.	**COMMON SYMPTOMS OF PESTICIDE POISONING:** Pinpoint pupils, nausea, blurred vision, shortness of breath, dizziness, headache.																		
9.	**WHERE TO OBTAIN EMERGENCY MEDICAL TREATMENT:** Name, address and telephone number of medical facility where emergency medical care is available.																		
10.	**PURPOSE AND REQUIREMENTS OF MEDICAL SUPERVISION:** Required when handling pesticides with "Danger" or "Warning" signal word that contains an organophosphate or carbamate.																		
11.	**APPLICABLE LAWS AND REGULATIONS; MSDSs; PSISs; AND LABEL REQUIREMENTS:** Importance of complying with the laws and regulations and label requirements.																		
12.	**EMPLOYEE RIGHTS:** To personally receive information on pesticides they may be exposed to; to have physician or their representative receive this information; protected against discharge or discrimination.																		
13.	**LOCATION OF DOCUMENTS/RECORDS:** Location of written Hazard Communication Program, use records, PSISs, MSDSs, exposure and monitoring records.																		

• ENTER DATE TRAINING GIVEN FOR EACH PESTICIDE

HAZARD COMMUNICATION

Department of Pesticide Regulation
Pesticide Enforcement Branch


Employee Training
(3 CCR §6724)
Employer Responsibilities for Employee Training
Property Operator
Pest Control Business
Farm Labor Contractor
Written Program Describing Materials/Documents Used for Training*
Examples Include:
- Study Guides, Pamphlets
- Labels, PSIS, MSDS
- Visual Aids, Training Outline
Kept Two Years at a Central Location
Before Employees Allowed to Handle Any Pesticide
Employer Must Record*:
- Date
- Extent of Initial Training/Annual Training Received
- Job Assignment
- Employee's Signature
- Employer's Signature
- Trainer's Signature
Kept Two Years at a Central Location
Employees Must Understand**:
- Immediate/Long Term Hazards of Pesticides
- Safety Procedures, Engineering Controls, Protective Clothing/Equipment
- Emergency Procedures; Symptoms, Decontamination; Medical Treatment
- Medical Supervision
- Applicable Laws, Regulations
- Availability of Written Hazard Communication Program, PSIS, MSDS, Exposure Records, Training Records
- "Right to Know"

* Must be Accessible.

** Must be Continually Updated for any New Pesticide Handled and Repeated Annually.

Employee Training

Employer Responsibilities:

- For Employees Who Handle Pesticides

  - Establish a written program describing materials/documents used for training.
  - Examples include:
    Study guides, pamphlets, labels, PSIS leaflets, MSDS, visual aids, training outline.
  - Keep program for two years at a central location.

- Training

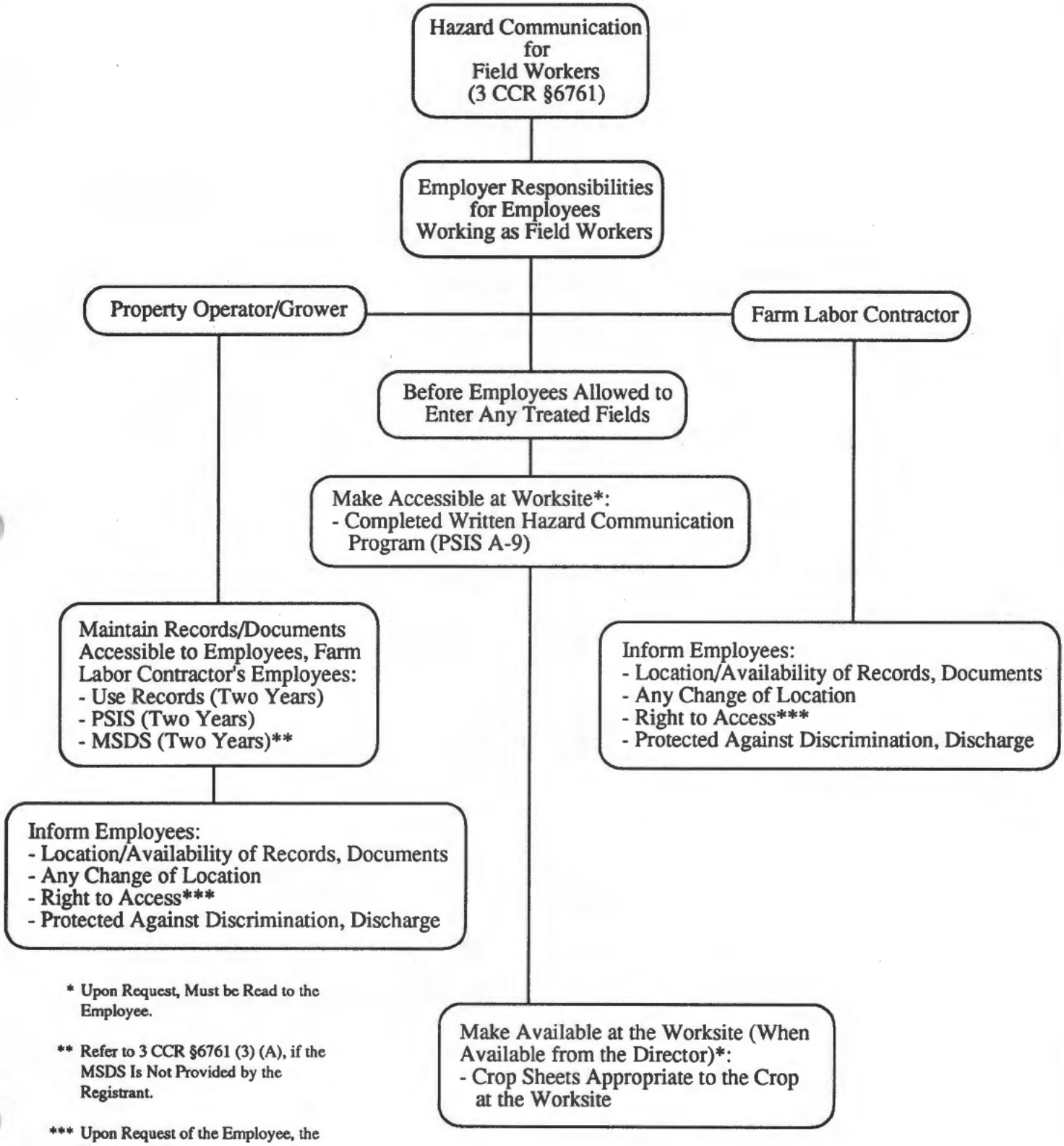
  - Immediate and long term hazards of pesticides.
  - Safety procedures, engineering controls, protective clothing, and equipment.
  - Emergency procedures; symptoms; decontamination; medical treatment.
  - Medical Supervision.
  - Applicable laws and regulations.
  - Availability of Written Hazard Communication Program, PSIS, MSDS, exposure records, training records.
  - "Right to Know".

- Training Record

  - Record must include:
    Date and extent of initial and annual training received.
    Employee's job assignment.
    Employee's, employer's, and trainer's signature.
  - Keep records for two years at a central location.

HAZARD COMMUNICATION

Department of Pesticide Regulation
Pesticide Enforcement Branch


Hazard Communication for Field Workers (3 CCR §6761)
Employer Responsibilities for Employees Working as Field Workers
Property Operator/Grower
Farm Labor Contractor
Before Employees Allowed to Enter Any Treated Fields
Make Accessible at Worksite*:
- Completed Written Hazard Communication Program (PSIS A-9)
Maintain Records/Documents Accessible to Employees, Farm Labor Contractor's Employees:
- Use Records (Two Years)
- PSIS (Two Years)
- MSDS (Two Years)**
Inform Employees:
- Location/Availability of Records, Documents
- Any Change of Location
- Right to Access***
- Protected Against Discrimination, Discharge
Inform Employees:
- Location/Availability of Records, Documents
- Any Change of Location
- Right to Access***
- Protected Against Discrimination, Discharge
Make Available at the Worksite (When Available from the Director)*:
- Crop Sheets Appropriate to the Crop at the Worksite

* Upon Request, Must be Read to the Employee.

** Refer to 3 CCR §6761 (3) (A), if the MSDS Is Not Provided by the Registrant.

*** Upon Request of the Employee, the Employee's Representative, or the Employee's Physician.

(Rev. 4/94)

Hazard Communication for Field Workers

Employer Responsibilities:

- Before Employees Enter Treated Fields

  - Make accessible at worksite, a completed Written Hazard Communication Program (PSIS A-9).
  - Make crop sheet available at worksite, for crop at site (when available from the Director).

- Operator of Property Must Maintain Records/Documents Accessible to Employees

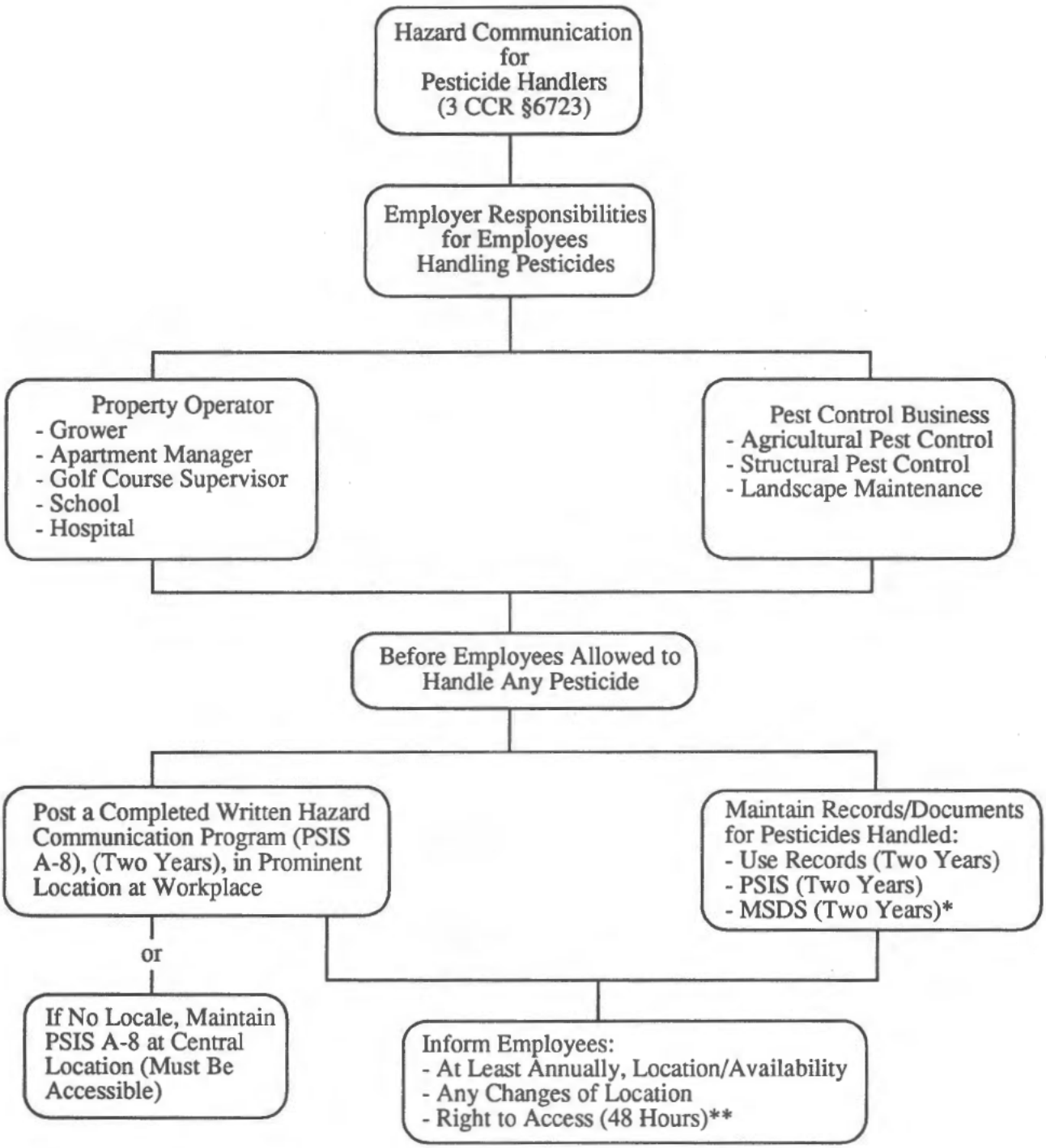
  - Pesticide Use Records, for two years.
  - Pesticide Safety Information Series (PSIS) leaflets, for two years.
  - Material Safety Data Sheets (MSDS), for two years.

- Operator of Property/Labor Contractor Must Inform Employees

  - Location/availability of records and documents (MSDS, PSIS, pesticide use records).
  - Any change of location of records or documents.
  - Right to access records within 48 hours of request.
  - Protected against discrimination, discharge.

HAZARD COMMUNICATION

Department of Pesticide Regulation
Pesticide Enforcement Branch


Hazard Communication for Pesticide Handlers (3 CCR §6723)
Employer Responsibilities for Employees Handling Pesticides
Property Operator
- Grower
- Apartment Manager
- Golf Course Supervisor
- School
- Hospital
Pest Control Business
- Agricultural Pest Control
- Structural Pest Control
- Landscape Maintenance
Before Employees Allowed to Handle Any Pesticide
Post a Completed Written Hazard Communication Program (PSIS A-8), (Two Years), in Prominent Location at Workplace
or
If No Locale, Maintain PSIS A-8 at Central Location (Must Be Accessible)
Maintain Records/Documents for Pesticides Handled:
- Use Records (Two Years)
- PSIS (Two Years)
- MSDS (Two Years)*
Inform Employees:
- At Least Annually, Location/Availability
- Any Changes of Location
- Right to Access (48 Hours)**

* Refer to 3 CCR §6723 (b) (3), if MSDS Not Provide by Registrant.

** Upon Request of Employee, Employee's Representative, or Employee's Physician.

(Rev. 4/94)

Hazard Communication for Pesticide Handlers

Employer Responsibilities:

- Before Employees Handle Pesticides

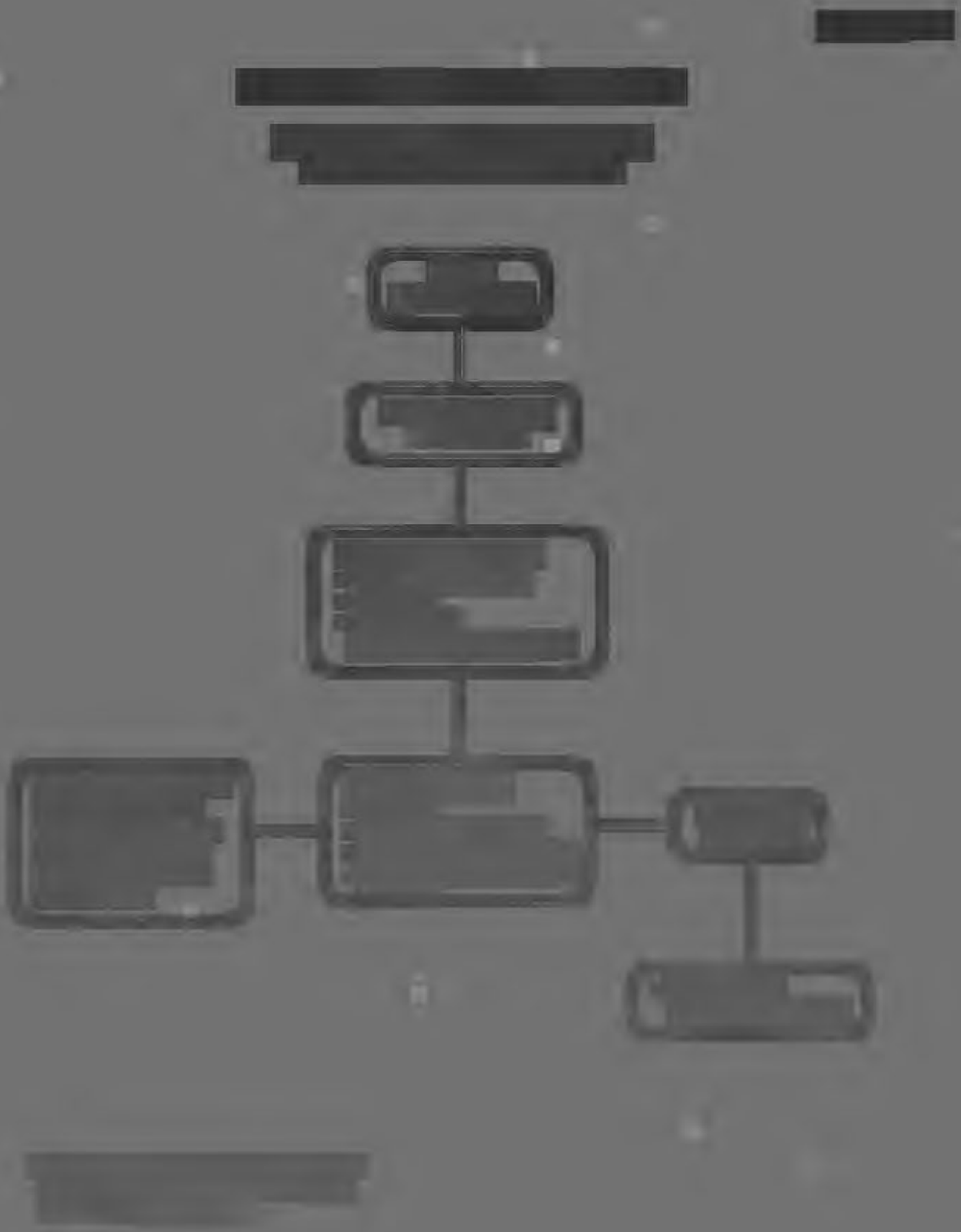
  - Post a completed Written Hazard Communication Program (PSIS A-8) in a prominent location at the workplace, or;
  - If no locale, where employee usually starts the workday, maintain PSIS A-8 at a central location, where it is accessible.

- Maintain Records/Documents Accessible to Employees

  - Pesticide use records, for two years.
  - Pesticide Safety Information Series (PSIS) leaflets, for two years.
  - Material Safety Data Sheets (MSDS), for two years.

- Inform Employees

  - At least annually, location/availability of records, and documents (MSDS, PSIS, pesticide use records).
  - Any change of location of records or documents.
  - Right to access records within 48 hours of request.



Notice

- Persons Performing Pest Control

  - Provide notice to operator of property before any pesticide is applied.
  - Notice must include:
    Date of application;
    Identity of the pesticide; and
    Precautions (reentry, preharvest, etc.).
  - Written notice by structural operators (B&P Code Section 8538).

- Operator of Property

  - Provide notice to all persons including labor contractors on treated property or likely to enter, while any reentry restrictions are in effect.
  - Notice must include:
    Date of application;
    Identity of the pesticide; and
    Precautions (reentry, preharvest, etc.).

- Farm Labor Contractor

  - Provide notice to his/her employees.
  - Notice must include the same information as required of the persons performing pest control or the operator of the property.

CALIFORNIA CROP SHEET

Location of Records and Safety Information

Name: Telephone #:

Address:

Emergency Medical Care

Facility/Doctor: Telephone #:

Address:

STRAWBERRIES

SAFETY TIPS

- Protect your skin
- Wear clothes with long sleeves, long pants
- Wear shoes or boots, socks, a hat and/or scarf and gloves
- Make sure they are clean and without holes

- Take a bath or shower after work
- Wash with soap and shampoo
- Put on clean clothes

- Always wash your hands before eating, drinking, smoking or going to the bathroom
- Do not cook food with wood found in the field

- Pesticides get on work clothes and then on skin
- Wash work clothes before wearing again
- Wash work clothes separate from other clothes

- Never put pesticides in food containers
- Do not take farm pesticides home
- Keep children away from pesticides

WORKER RIGHTS

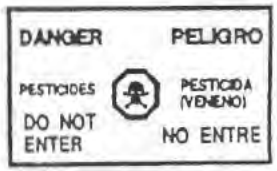
- You have the right to know the pesticides used where you work
- The information can be found at the address above (or in Pesticide Safety Information Series A9)
- You can call and ask for the spray record or go look at it

- You can confidentially file a complaint of unsafe conditions
- Call the County Agricultural Commissioner or Cal/OSHA
- The phone number is in the government pages of the phone book
- You cannot be fired for filing a complaint

ILLNESS/INJURY

- Tell the boss if you are sick or hurt
- The first doctor's visit will be paid by your employer
- If the illness/injury is work-related, your employer will pay for all medical care of that illness and time off work while sick or hurt

REENTRY INTERVALS



- Pesticides get on your skin and clothes when you touch sprayed plants
- Pesticides take time to go away
- Reentry intervals keep you out of the field until it is safe

- Signs like this tell you to stay out of the field
- Irrigators & tractor drivers may go into posted fields if they are told about the dangers and safe work procedures and are using the protection required

PRIMEROS AUXILIOS

- Lávese inmediatamente si ha sido salpicado y expuesto al rocío
- Cambiese a ropa limpia
- Después de lavarse avísele a su jefe

- Lávese si siente picazón o quemazón en los ojos o la piel
- Use bastante agua
- Avísele a su jefe que debería ir al médico

- Si siente malestar (dolor de cabeza, dolor de estómago, vómito, mareo, etc.) avísele a su jefe
- El jefe se encargará que lo lleven a un médico

- Nunca maneje usted si está enfermo o lesionado

FRUTILLAS (FRESAS)

Los pesticidas en la lista que sigue son los que se usan con más frecuencia en este cultivo. Estos pesticidas pueden haberse usado o no haberse usado en el campo donde usted está trabajando. Puede preguntarle a su jefe o ponerse en contacto con la persona mencionada al principio de este documento (o en la serie informativa Seguridad con Pesticidas A-9) para obtener información específica.

Pesticidas Usados con Mayor Frecuencia	Meses en que se Usan Generalmente (E F M A M J J A S O N D)	Intervalo de Entrada para Frutillas (fresas)	Síntomas Comunes de Sobre-exposición	Notas
Metilo, Bromuro de Región 1 Región 2		Aplicación al suelo antes de plantar	Dolor de cabeza, náusea, vertígos, vómito y temblor Quemazón cutánea severa, picazón y ampollas en la piel	Si tiene alguna pregunta, puede comunicarse con la oficina del Comisionado de Agricultura de su localidad o la Sección de Salud del Trabajador (Cal/EPA, Departament de Reglamentación de Pesticidas), 1220 N Street Sacramento, California, 95814 (916) [redacted]
Azufre Región 1 Región 2		El rocío se ha secado El polvo se ha asentado	Quemazón o picazón cutánea o los ojos irritación respiratoria (toz, extornudos, dificultad en respirar)	
Bacillus thuringiensis Región 1 Región 2		El rocío se ha secado El polvo se ha asentado	Síntomas de enfermedad no han sido documentados después de hacer estudios de exposición humana o estudios en animales	
Malatión Región 1 Región 2		El rocío se ha secado El polvo se ha asentado	Primeros síntomas - dolor de cabeza, náusea, vértigos; pueden empeorar a espasmos musculares, debilidad, vómito, calambres abdominales, diarrea, y sudoración y salivación excessiva	
Benomil Región 1 Región 2		El rocío se ha secado El polvo se ha asentado	Irritante a los ojos y cutánea; posible reacción alérgica	
Avermectin Región 1 Región 2		El rocío se ha secado El polvo se ha asentado	Desconocidos	
Iprodione Región 1 Región 2		El rocío se ha secado El polvo se ha asentado	En California se han encontrado casos de irritación a la piel y en los ojos	

Preparado por: Agencia de Protección Ambiental de California
Departamento de Reglamentación de Pesticidas
Sección de Salud y Seguridad del Trabajador

FIRST AID

- Wash immediately if sprayed or exposed to spray drift
- Change into clean clothes
- Tell your boss after washing

- Wash if your eyes or skin begin to itch or burn
- Use lots of water
- Tell your boss, you should go to a doctor

- If you feel sick (headache, stomach ache, vomiting, dizzy, etc.) tell your boss
- He can make sure you are taken to a doctor

- Never drive yourself to the doctor if you are sick or injured

STRAWBERRIES

The pesticides listed are those most commonly used on this crop. These pesticides may or may not have been used on the field you are working in. You can ask your boss or contact the person on the front of this sheet (or in Pesticide Safety Information Series A9) for specific information

Pesticides Used Most Often	Months Commonly Used (J F M A M J J A S O N D)	Reentry Interval for Strawberries	Common Symptoms of Overexposure	Notes
Methyl bromide Region 1 Region 2		Application made to soil before planting	Headache, nausea, dizziness, vomiting, tremors Severe burning, itching and blistering of skin	If you have any questions, you can contact your Agricultural Commissioner's office or the Worker Health and Safety Branch (Cal/EPA, Department of Pesticide Regulation), 1220 N Street, Suite 620, Sacramento, California 95814 [redacted]
Sulfur Region 1 Region 2		Spray is dry Dust is settled	Burning or itching skin or eyes Respiratory irritation (coughing, sneezing hard to breathe)	
Bacillus thuringiensis Region 1 Region 2		Spray is dry Dust is settled	Symptoms of illness have not been noted following human exposure or in animal studies	
Malathion Region 1 Region 2		Spray is dry Dust is settled	Most common symptoms - headache, nausea, dizziness; may worsen to muscle twitching, weakness, vomiting, stomach cramps, diarrhea and excessive sweating and salivating	
Benomyl Region 1 Region 2		Spray is dry Dust is settled	Irritating to the eyes and skin Possible allergic reaction	
Avermectin Region 1 Region 2		Spray is dry Dust is settled	Unknown	
Iprodione Region 1 Region 2		Spray is dry Dust is settled	Skin and eye irritation have been reported in California	

Developed by: *California Environmental Protection Agency*
Department of Pesticide Regulation
Worker Health and Safety Branch

GUIA DE CULTIVOS DE CALIFORNIA

Localización de los Datos e Información de Seguridad

Nombre: Teléfono #:

Dirección:

Servicio Médico de Emergencia

Clínica o Médico: Teléfono #:

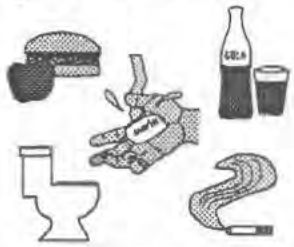
Dirección:

FRUTILLAS (FRESAS)

CONSEJOS DE SEGURIDAD

- Proteja su piel
- Use manga larga y pantalones largos
- Use zapatos o botas, calcetines, un sombrero o una bandana y guantes
- Asegúrese que estén limpios y sin roturas

- Dése un baño o una ducha después del trabajo
- Lávese con jabón y champú
- Póngase ropa limpia



- Lávese siempre las manos antes de comer, beber o fumar, y antes de ir al baño
- No cocine con leña que ha encontrado en el campo

- Los pesticidas se adhieren a la ropa de trabajo y después pasan a la piel
- Lave la ropa de trabajo antes de volverla a usar
- Lave la ropa de trabajo separada de otra ropa

- Nunca ponga pesticidas en envases de alimentos
- No lleve a casa los pesticidas que usa en el campo
- Mantenga los niños alejados de los de pesticidas

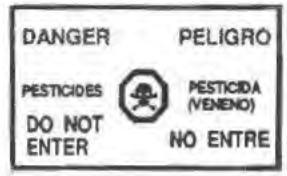
DERECHOS DE LOS TRABAJADORES

- Usted tiene derecho a saber que pesticidas se usan en su trabajo
- Esa información puede encontrarla en la dirección ya mencionada (o en la serie informativa Seguridad con Pesticidas A-9
- Usted puede pedirla por teléfono o puede ir a mirarla
- Denuncias de condiciones peligrosas son confidenciales
- Llame al Comisionado Agrícola del Condado o Cal/OSHA
- Número telefónico en sección gobierno de la guía
- No pueden hecharlo del trabajo por presentar una denuncia

ENFERMEDAD/ LESION

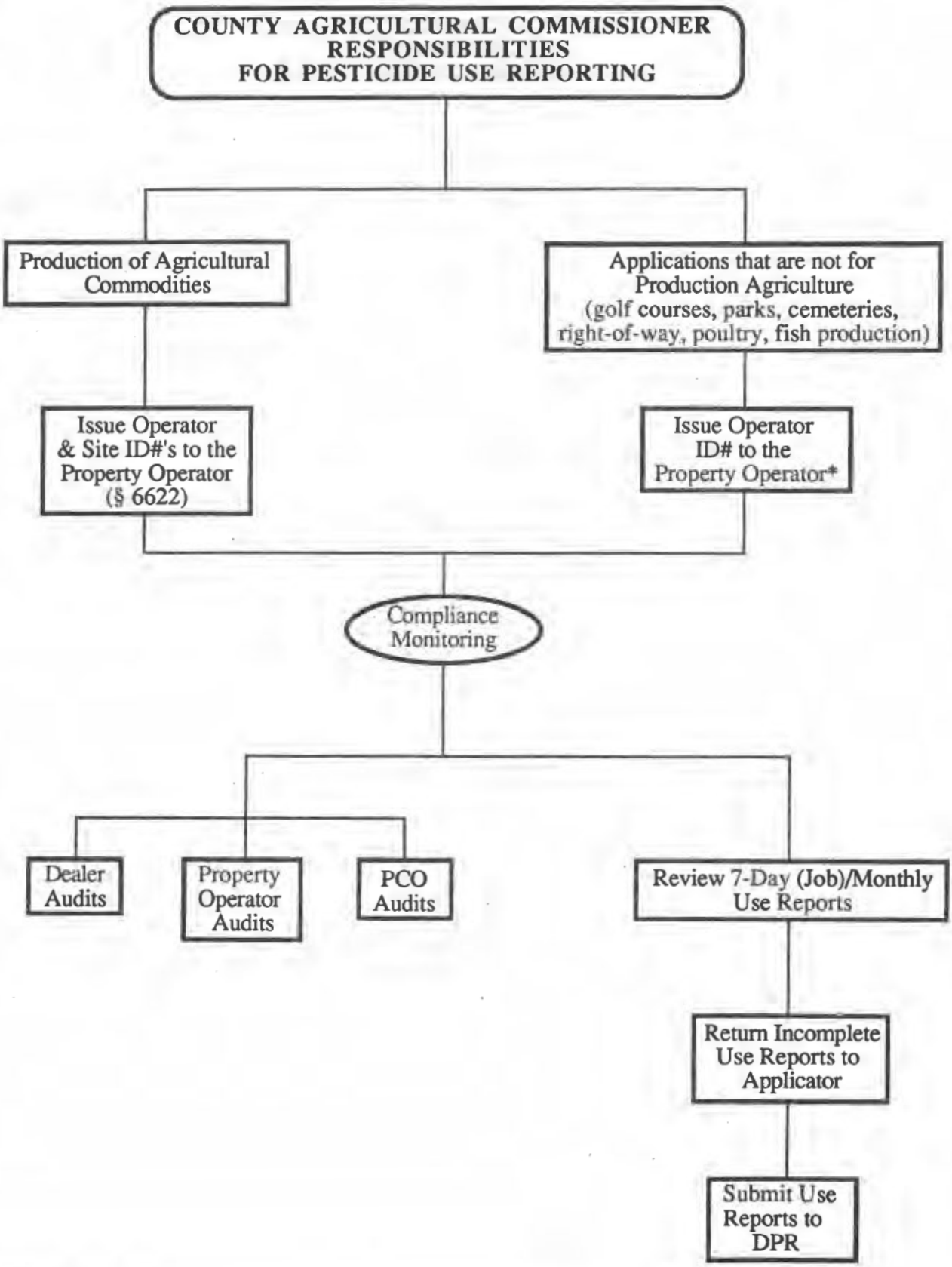
- Avísele al jefe si está enfermo o se ha lesionado
- La primera visita al médico la pagará el empleador
- Si la enfermedad o lesión es a causa del trabajo su empleador pagará toda la atención médica y el tiempo que no pueda trabajar

INTERVALO DE ENTRADA



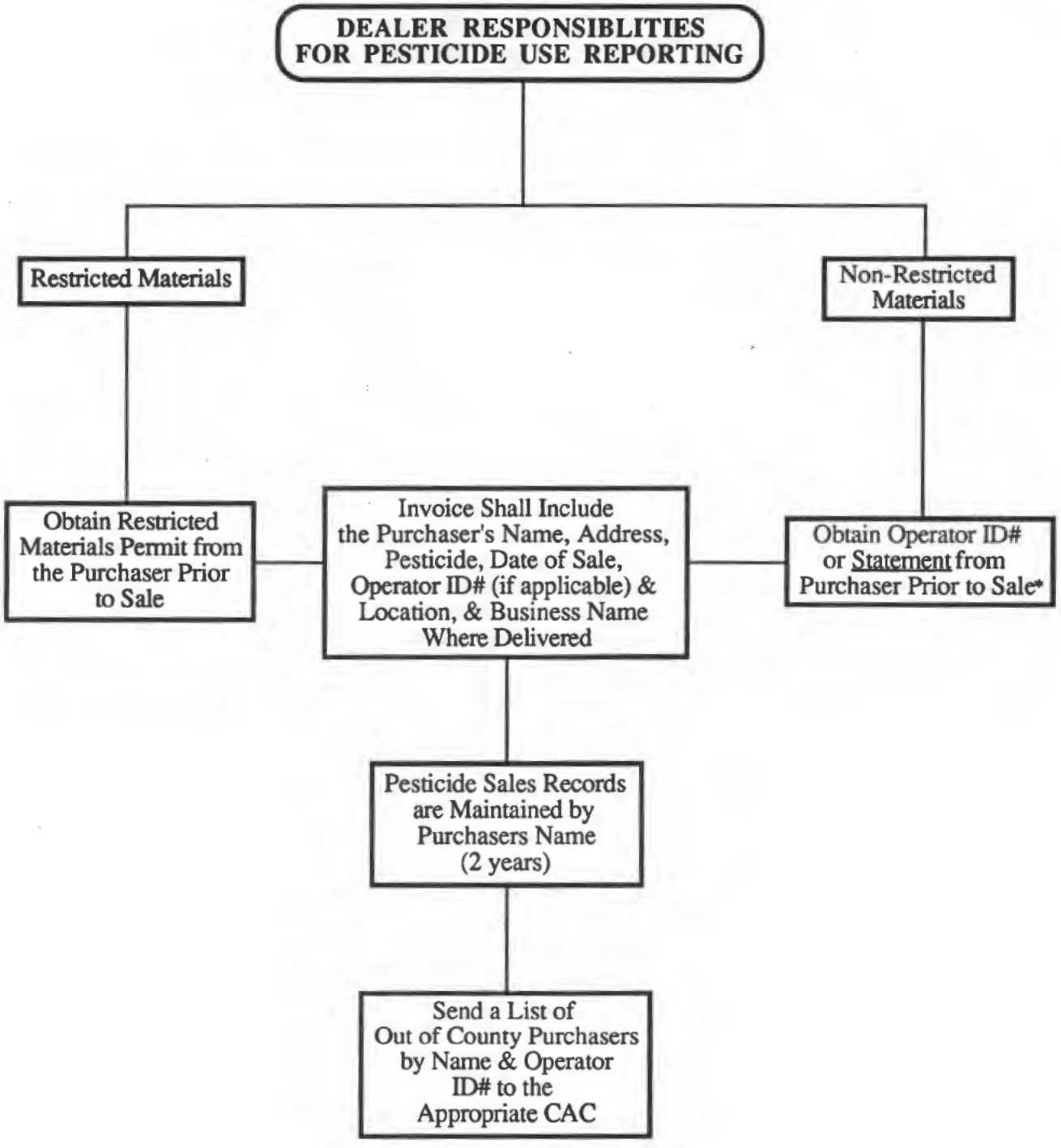
- Los pesticidas se adhieren a su piel y ropa cuando toca plantas rociadas
- Los pesticidas toman tiempo en disiparse
- Los intervalos de entrada no le permiten entrar al campo hasta que pueda hacerlo sin peligro
- Letreros como este advierten no entrar al campo
- Los regadores o tractoristas pueden entrar siempre que se les advierta el peligro y los procedimientos de seguridad y que usen la protección requerida

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF PESTICIDE REGULATION


COUNTY AGRICULTURAL COMMISSIONER RESPONSIBILITIES FOR PESTICIDE USE REPORTING
Production of Agricultural Commodities
Applications that are not for Production Agriculture (golf courses, parks, cemeteries, right-of-way, poultry, fish production)
Issue Operator & Site ID#'s to the Property Operator (§ 6622)
Issue Operator ID# to the Property Operator*
Compliance Monitoring
Dealer Audits
Property Operator Audits
PCO Audits
Review 7-Day (Job)/Monthly Use Reports
Return Incomplete Use Reports to Applicator
Submit Use Reports to DPR

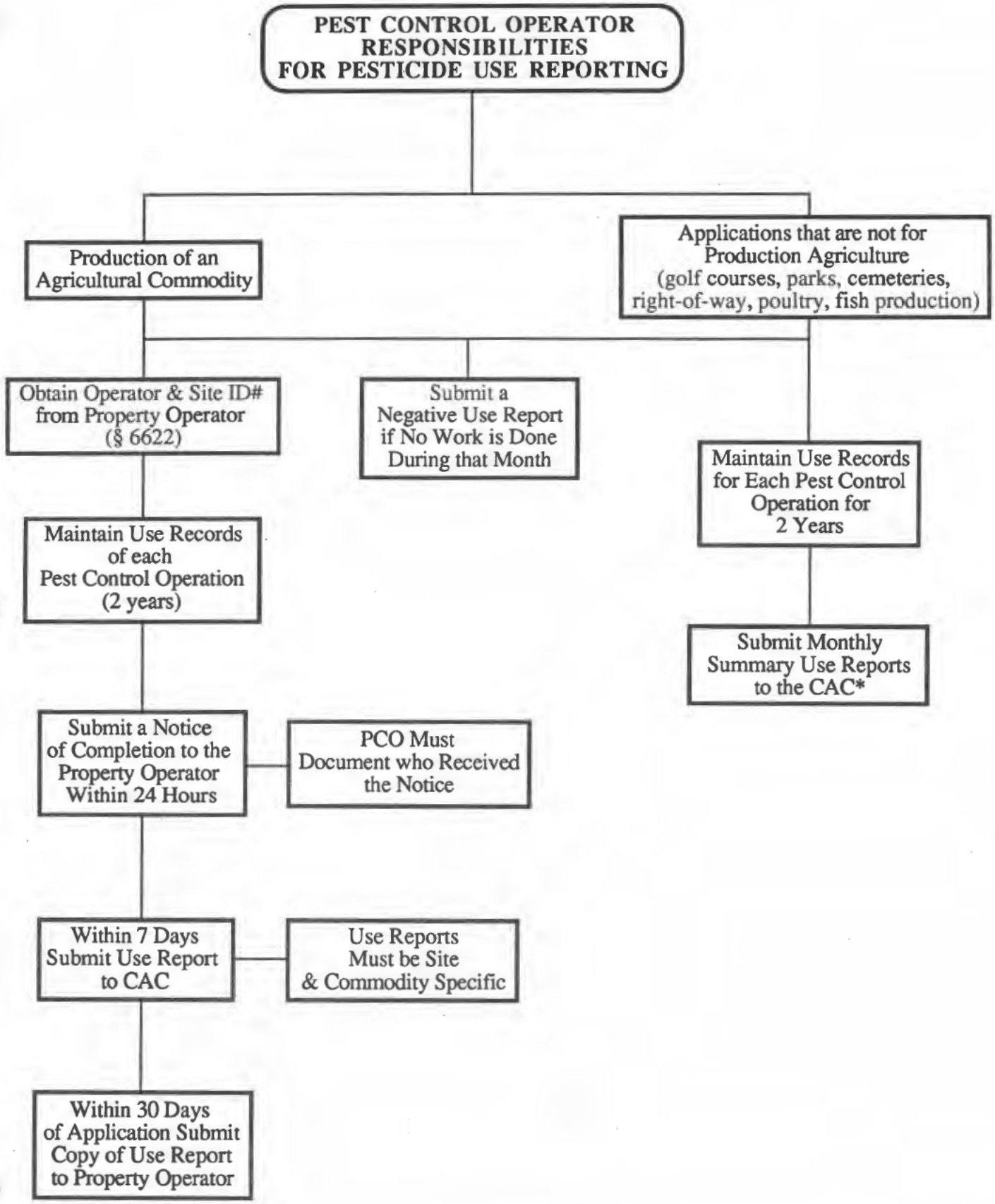
* The operator identification number is not required if the application was made by a person performing pest control for hire.

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF PESTICIDE REGULATION


DEALER RESPONSIBLITIES FOR PESTICIDE USE REPORTING
Restricted Materials
Non-Restricted Materials
Obtain Restricted Materials Permit from the Purchaser Prior to Sale
Invoice Shall Include the Purchaser's Name, Address, Pesticide, Date of Sale, Operator ID# (if applicable) & Location, & Business Name Where Delivered
Obtain Operator ID# or Statement from Purchaser Prior to Sale*
Pesticide Sales Records are Maintained by Purchasers Name (2 years)
Send a List of Out of County Purchasers by Name & Operator ID# to the Appropriate CAC

* The statement would indicate that the purchaser is not required to obtain an operator identification number pursuant to Section 6622.

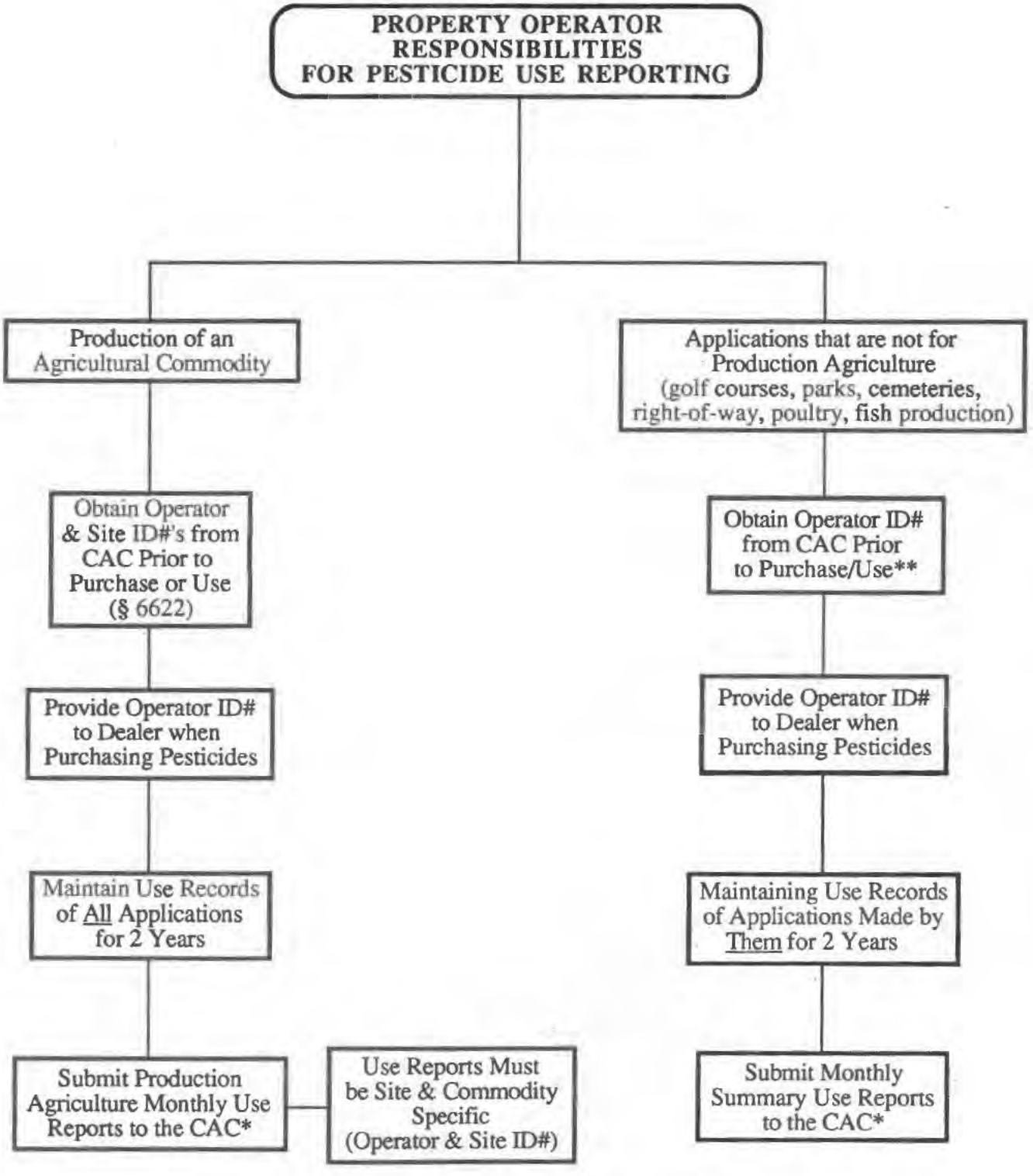
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF PESTICIDE REGULATION


PEST CONTROL OPERATOR RESPONSIBILITIES FOR PESTICIDE USE REPORTING
Production of an Agricultural Commodity
Applications that are not for Production Agriculture (golf courses, parks, cemeteries, right-of-way, poultry, fish production)
Obtain Operator & Site ID# from Property Operator (§ 6622)
Submit a Negative Use Report if No Work is Done During that Month
Maintain Use Records for Each Pest Control Operation for 2 Years
Maintain Use Records of each Pest Control Operation (2 years)
Submit Monthly Summary Use Reports to the CAC*
Submit a Notice of Completion to the Property Operator Within 24 Hours
PCO Must Document who Received the Notice
Within 7 Days Submit Use Report to CAC
Use Reports Must be Site & Commodity Specific
Within 30 Days of Application Submit Copy of Use Report to Property Operator

* These reports are due before the 10th day of the month following the month of application.

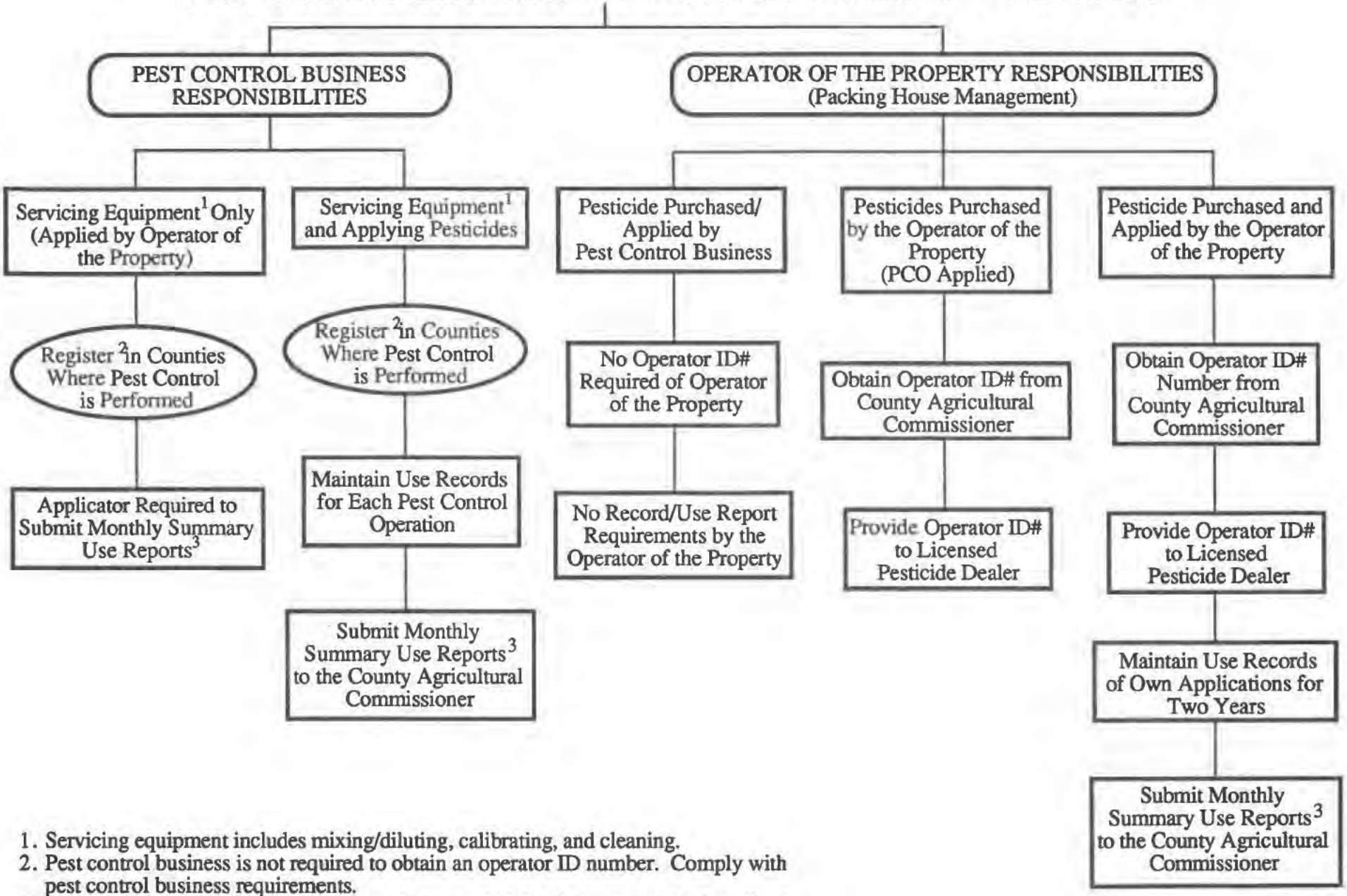
4/92

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF PESTICIDE REGULATION


PROPERTY OPERATOR RESPONSIBILITIES FOR PESTICIDE USE REPORTING
Production of an Agricultural Commodity
Applications that are not for Production Agriculture (golf courses, parks, cemeteries, right-of-way, poultry, fish production)
Obtain Operator & Site ID#'s from CAC Prior to Purchase or Use (§ 6622)
Obtain Operator ID# from CAC Prior to Purchase/Use**
Provide Operator ID# to Dealer when Purchasing Pesticides
Provide Operator ID# to Dealer when Purchasing Pesticides
Maintain Use Records of All Applications for 2 Years
Maintaining Use Records of Applications Made by Them for 2 Years
Submit Production Agriculture Monthly Use Reports to the CAC*
Use Reports Must be Site & Commodity Specific (Operator & Site ID#)
Submit Monthly Summary Use Reports to the CAC*

* These reports are due before the 10th day of the month following the month of application.
** The operator identification number is not required if the application was made by a person performing pest control for hire.

CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION
PESTICIDE APPLICATIONS: POST HARVEST COMMODITY TREATMENT


PEST CONTROL BUSINESS RESPONSIBILITIES
OPERATOR OF THE PROPERTY RESPONSIBILITIES (Packing House Management)
Servicing Equipment[1] Only (Applied by Operator of the Property)
Servicing Equipment[1] and Applying Pesticides
Pesticide Purchased/ Applied by Pest Control Business
Pesticides Purchased by the Operator of the Property (PCO Applied)
Pesticide Purchased and Applied by the Operator of the Property
Register[2] in Counties Where Pest Control is Performed
Register[2] in Counties Where Pest Control is Performed
No Operator ID# Required of Operator of the Property
Obtain Operator ID# from County Agricultural Commissioner
Obtain Operator ID# Number from County Agricultural Commissioner
Applicator Required to Submit Monthly Summary Use Reports[3]
Maintain Use Records for Each Pest Control Operation
No Record/Use Report Requirements by the Operator of the Property
Provide Operator ID# to Licensed Pesticide Dealer
Provide Operator ID# to Licensed Pesticide Dealer
Submit Monthly Summary Use Reports[3] to the County Agricultural Commissioner
Maintain Use Records of Own Applications for Two Years
Submit Monthly Summary Use Reports[3] to the County Agricultural Commissioner

1. Servicing equipment includes mixing/diluting, calibrating, and cleaning.
2. Pest control business is not required to obtain an operator ID number. Comply with pest control business requirements.
3. These reports are due by the tenth day of the month following the month of application.

Rev. 4/94

GROUNDWATER PROTECTION LIST

PESTICIDES LABELED FOR AGRICULTURAL, OUTDOOR INSTITUTIONAL OR OUTDOOR INDUSTRIAL USE THAT CONTAIN ANY OF THE FOLLOWING CHEMICALS ARE DESIGNATED AS HAVING THE POTENTIAL TO POLLUTE GROUNDWATER. REFER TO THE CALIFORNIA CODE OF REGULATIONS, TITLE 3, SECTION 6800.

CCR 6800(a) - THE FOLLOWING ECONOMIC POISONS HAVE BEEN DETECTED IN GROUNDWATER OR SOIL PURSUANT TO SECTION 13149 OF THE FOOD AND AGRICULTURAL CODE

ATRAZINE	BROMACIL	PROMETON
BENTAZON (BASAGRAN®)	DIURON	SIMAZINE

CCR 6800(b) - THE FOLLOWING ECONOMIC POISONS HAVE THE POTENTIAL TO POLLUTE GROUNDWATER AND HAVE BEEN IDENTIFIED PURSUANT TO SECTION 13145(d) OF THE FOOD AND AGRICULTURAL CODE

ACEPHATE	DICHLOBENIL	FOSETYL-AL TECHNICAL	NAPTALAM, SODIUM SALT
ALACHLOR	DICHLORAN	HEXAZINONE	NORFLURAZON
ALDICARB	DIETHATYL-ETHYL	LINURON	ORYZALIN
AZINPHOS-METHYL	DIMETHOATE	METALAXYL	OXYDEMETON-METHYL
BENSULIDE	DIQUAT DIBROMIDE	METALDEHYDE	PARATHION
BUTYLATE	DISULFOTON	METHIOCARB	PEBULATE
CHLOROPICRIN	EPTC	METHOMYL	PROMETRYN
CHLORSULFURON	ETHOFUMESATE	METHYL ISOTHIOCYANATE	PROPYZAMIDE
CYANAZINE	ETHOPROP	METOLACHLOR	SULFOMETURON-METHYL
CYCLOATE	FENAMIPHOS	METRIBUZIN	TEBUTHIURON
2,4-D, DIMETHYLAMINE SALT	FLUOMETURON	MOLINATE	TRIALLATE
DIAZINON	FONOFOS	NAPROPAMIDE	VERNOLATE

GROUNDWATER PROTECTION RESTRICTIONS

A PERMIT IS REQUIRED FOR POSSESSION OR USE OF A PESTICIDE CONTAINING A CHEMICAL LISTED IN CCR SECTION 6800(a) WHEN ITS USE IS INTENDED FOR AGRICULTURAL, OUTDOOR INSTITUTIONAL, OR OUTDOOR INDUSTRIAL USE IN THE FOLLOWING SITUATIONS:

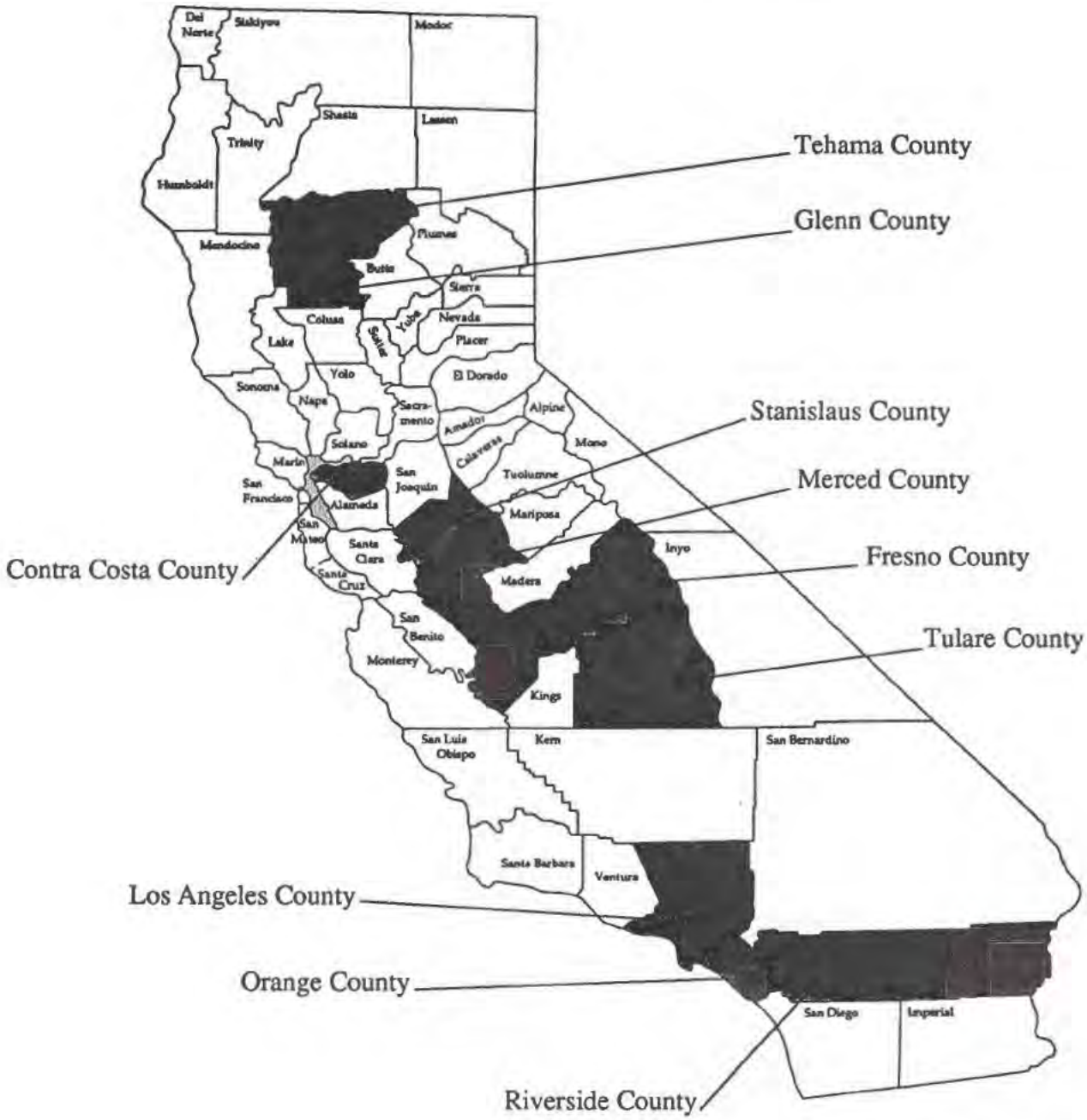
- WHEN THE USE IS TO OCCUR WITHIN A CHEMICAL'S PESTICIDE MANAGEMENT ZONE (PMZ)** DESIGNATED IN CCR SECTION 6802.
- WHEN THE PESTICIDE TO BE USED CONTAINS A CHEMICAL FOR WHICH NO PMZ HAS BEEN ESTABLISHED IN CCR SECTION 6802.
- WHEN THE PESTICIDE TO BE USED IS ALSO RESTRICTED FOR PURPOSES OTHER THAN GROUNDWATER PROTECTION.
- A USE PERMIT FOR A PESTICIDE CONTAINING A CHEMICAL CONTAINED IN 6800(a) IN A CHEMICAL'S PMZ WILL NOT BE ISSUED UNLESS THE APPLICANT SUBMITS A GROUNDWATER PROTECTION ADVISORY WRITTEN BY A LICENSED PEST CONTROL ADVISER WHO HAS COMPLETED THE GROUNDWATER PROTECTION TRAINING PROGRAM APPROVED AND ADMINISTERED BY THE DEPARTMENT OF PESTICIDE REGULATION (DPR).
- A USE PERMIT IS NOT REQUIRED FOR A CHEMICAL LISTED IN SECTION 6800(a) WHEN THE PESTICIDE IS USED IN A PEST ERADICATION PROGRAM APPROVED BY DPR, UNLESS THE PESTICIDE IS ALSO RESTRICTED FOR PURPOSES OTHER THAN GROUNDWATER PROTECTION.
- THE CHEMICALS LISTED IN 6800(a) MAY BE APPLIED FOR RESEARCH OR EXPERIMENTAL PURPOSES PURSUANT TO A VALID RESEARCH AUTHORIZATION. THE APPLICANT MUST PROVIDE THE LOCATION OF THE RESEARCH OR EXPERIMENTAL SITE WITH THE RESEARCH AUTHORIZATION REQUEST. THE EXEMPTIONS FOUND IN CCR SECTION 6268 DO NOT APPLY WHEN THESE CHEMICALS ARE USED FOR RESEARCH OR EXPERIMENTAL PURPOSES.

** Pesticide Management Zone (PMZ) - A Pesticide Management Zone is a geographical area of approximately one square mile which is sensitive to groundwater pollution and which corresponds to a section defined by base meridian, township, range and section, or by latitude and longitude or other generally accepted geographical coordinates.

NOTE: A permit is not required for possession or use of a pesticide containing a chemical listed in CCR Section 6800(a) outside of a PMZ for most cases, however, the person who purchases/supervises the use or uses of these chemicals must be a certified applicator. Exception: a certified private applicator must also obtain a permit.

For more information, contact your county agricultural commissioner's office.

Ten Counties in California with Sections of Land Established as Pesticide Management Zones



Ten counties in California (Contra Costa, Fresno, Glenn, Los Angeles, Merced, Orange, Riverside, Stanislaus, Tehama, and Tulare Counties) have sections of land established in the California Code of Regulations §6802, as of December 1, 1992, as Pesticide Management Zones (PMZs). A PMZ is a section of land, approximately one square mile, which is sensitive to ground water pollution. The use of a pesticide inside a PMZ where it has been detected in ground water due to legal, agricultural use is subject to certain ground water protection restrictions and requirements. **A detailed map featuring the location of the PMZs for each of the ten counties is shown on the following three pages.**

Federally Listed Threatened and Endangered Species

as of December 1994

The map shown above is an overview of occurrences of federally listed species including "Threatened and Endangered", proposed "Threatened and Endangered", and Category 1 candidates as of December 1994. Each dot on the map represents the location of a threatened or endangered plant or animal species.

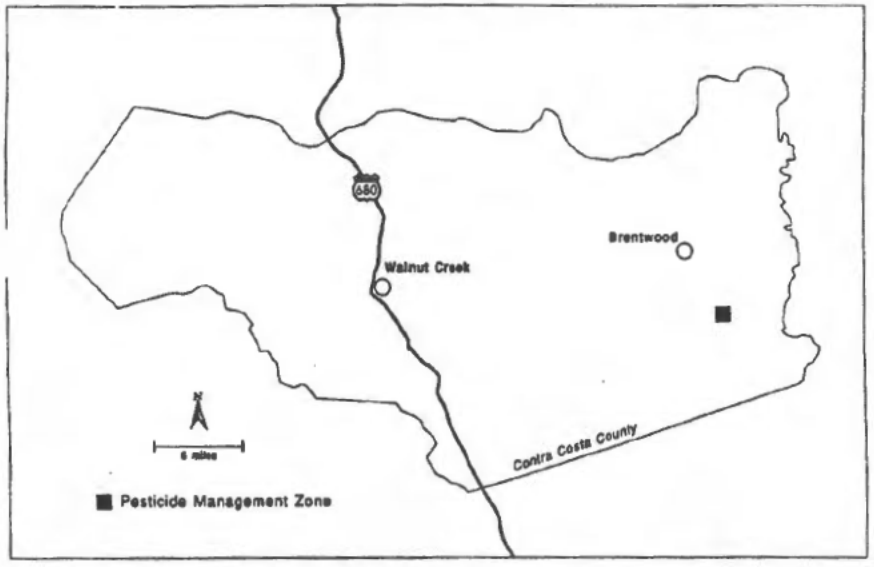


Figure 1. Section of land established in regulation as of December 1, 1992 as a Pesticide Management Zone (PMZ) in Contra Costa County. A PMZ is a section of land, approximately one square mile, which is sensitive to ground water pollution. The use of a pesticide inside a PMZ where it has been detected in ground water due to legal, agricultural use is subject to certain ground water protection restrictions and requirements.

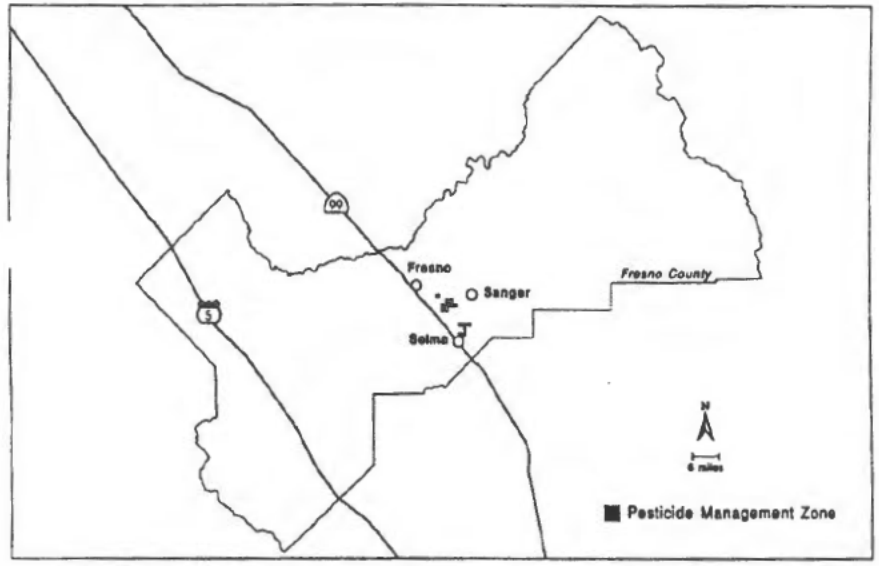


Figure 2. Sections of land established in regulation as of December 1, 1992 as Pesticide Management Zones (PMZs) in Fresno County. A PMZ is a section of land, approximately one square mile, which is sensitive to ground water pollution. The use of a pesticide inside a PMZ where it has been detected in ground water due to legal, agricultural use is subject to certain ground water protection restrictions and requirements.

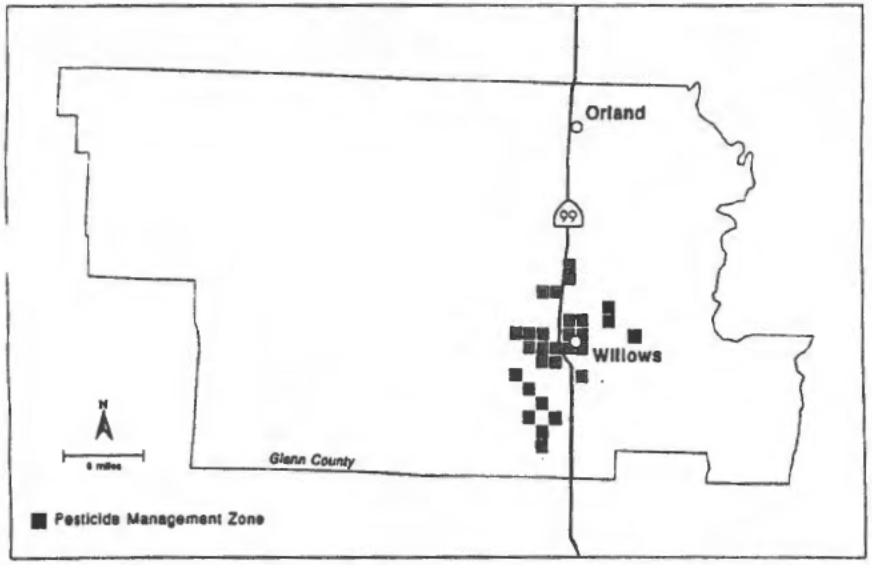


Figure 3. Sections of land established in regulation as of December 1, 1992 as Pesticide Management Zones (PMZs) in Glenn County. A PMZ is a section of land, approximately one square mile, which is sensitive to ground water pollution. The use of a pesticide inside a PMZ where it has been detected in ground water due to legal, agricultural use is subject to certain ground water protection restrictions and requirements.

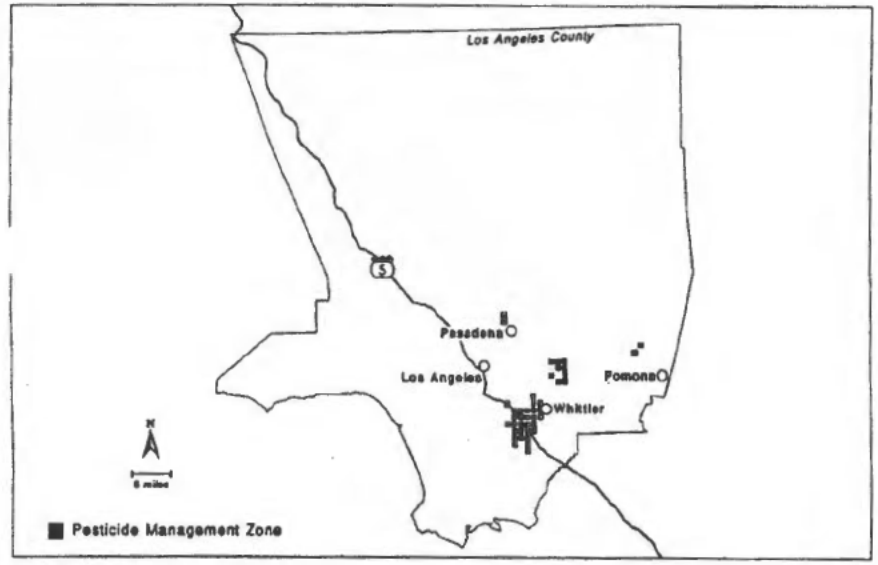


Figure 4. Sections of land established in regulation as of December 1, 1992 as Pesticide Management Zones (PMZs) in Los Angeles County. A PMZ is a section of land, approximately one square mile, which is sensitive to ground water pollution. The use of a pesticide inside a PMZ where it has been detected in ground water due to legal, agricultural use is subject to certain ground water protection restrictions and requirements.

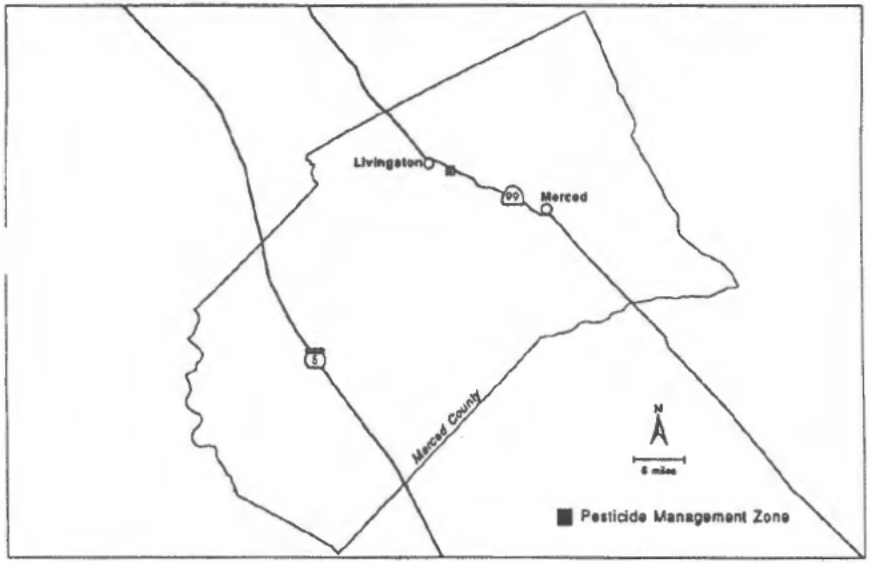


Figure 5. Section of land established in regulation as of December 1, 1992 as a Pesticide Management Zone (PMZ) in Merced County. A PMZ is a section of land, approximately one square mile, which is sensitive to ground water pollution. The use of a pesticide inside a PMZ where it has been detected in ground water due to legal, agricultural use is subject to certain ground water protection restrictions and requirements.

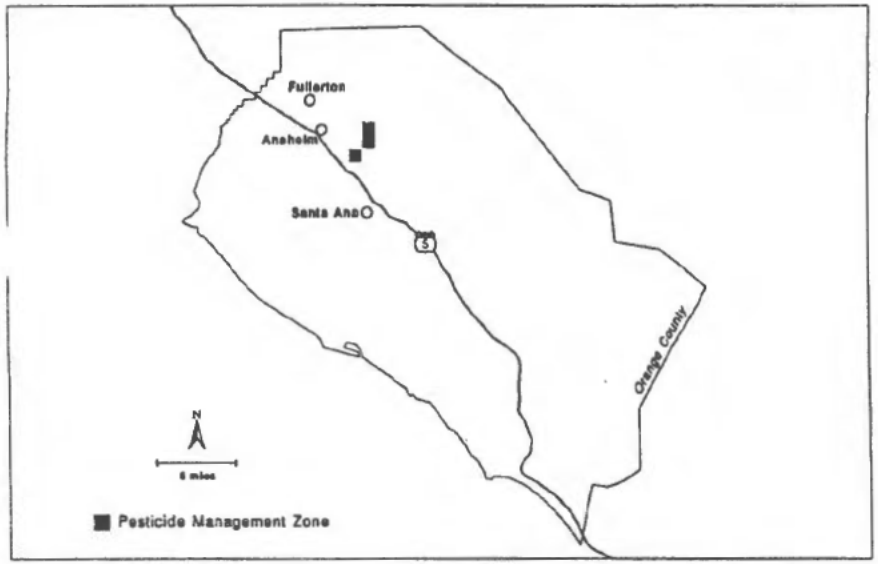


Figure 6. Sections of land established in regulation as of December 1, 1992 as Pesticide Management Zone(s) (PMZs) in Orange County. A PMZ is a section of land, approximately one square mile, which is sensitive to ground water pollution. The use of a pesticide inside a PMZ where it has been detected in ground water due to legal, agricultural use is subject to certain ground water protection restrictions and requirements.

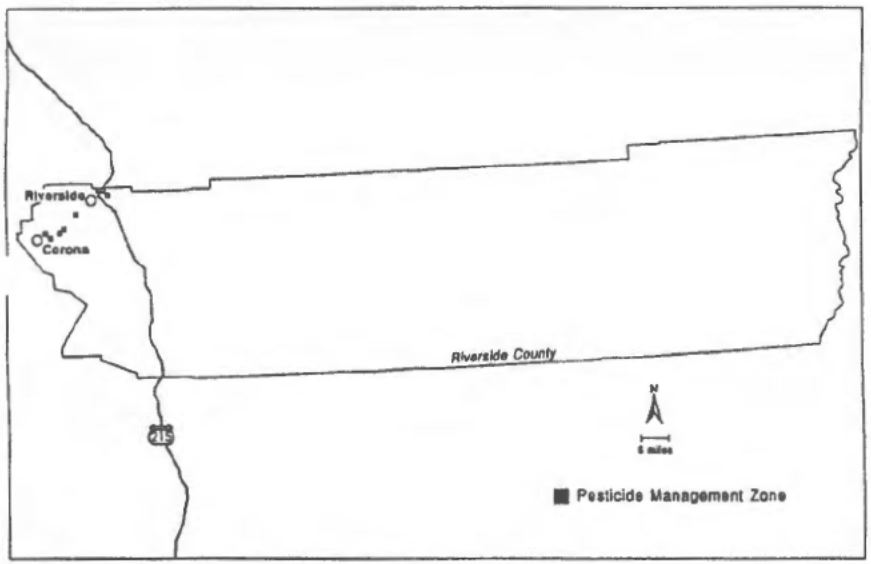


Figure 7. Sections of land established in regulation as of December 1, 1992 as Pesticide Management Zone(s) (PMZs) in Riverside County. A PMZ is a section of land, approximately one square mile, which is sensitive to ground water pollution. The use of a pesticide inside a PMZ where it has been detected in ground water due to legal, agricultural use is subject to certain ground water protection restrictions and requirements.

Figure 8. Sections of land established in regulation as of December 1, 1992 as Pesticide Management Zone(s) (PMZs) in Stanislaus County. A PMZ is a section of land, approximately one square mile, which is sensitive to ground water pollution. The use of a pesticide inside a PMZ where it has been detected in ground water due to legal, agricultural use is subject to certain ground water protection restrictions and requirements.

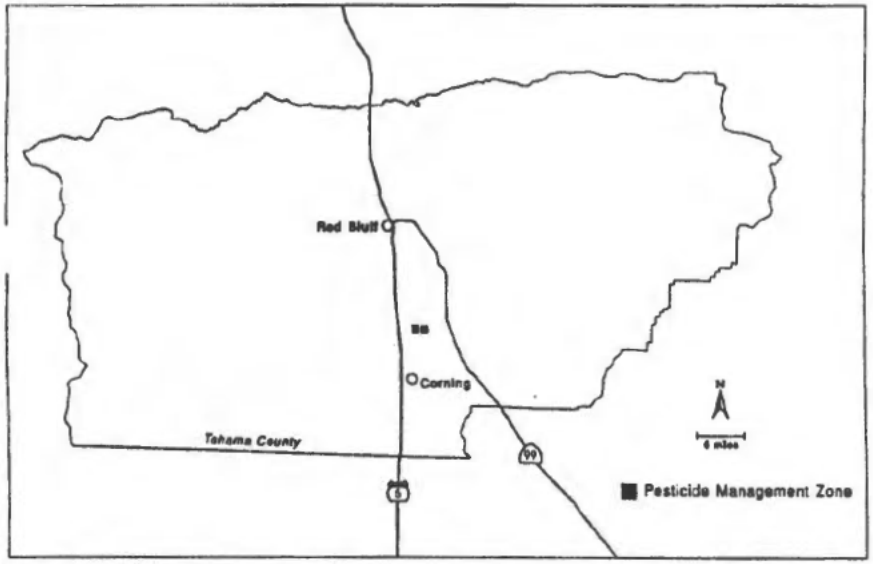


Figure 9. Sections of land established in regulation as of December 1, 1992 as Pesticide Management Zone(s) (PMZs) in Tehama County. A PMZ is a section of land, approximately one square mile, which is sensitive to ground water pollution. The use of a pesticide inside a PMZ where it has been detected in ground water due to legal, agricultural use is subject to certain ground water protection restrictions and requirements.

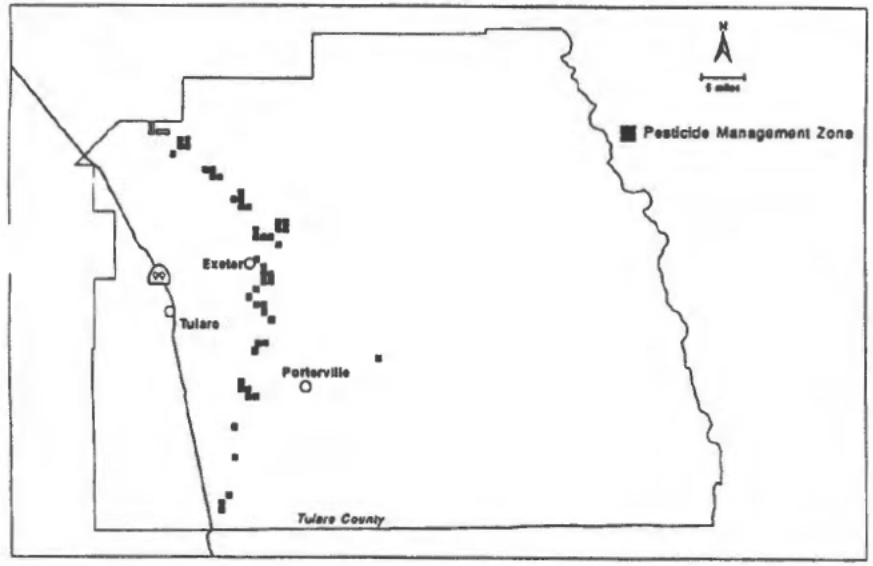


Figure 10. Sections of land established in regulation as of December 1, 1992 as Pesticide Management Zone(s) (PMZs) in Tulare County. A PMZ is a section of land, approximately one square mile, which is sensitive to ground water pollution. The use of a pesticide inside a PMZ where it has been detected in ground water due to legal, agricultural use is subject to certain ground water protection restrictions and requirements.

MINIMAL EXPOSURE PESTICIDES

TRADE NAMES ARE INCLUDED IN THE INTEREST OF SIMPLICITY. OTHER PRODUCTS WITH THE SAME COMPOUND AS AN ACTIVE INGREDIENT ARE ALSO SUBJECT TO THE MINIMAL EXPOSURE PESTICIDE SAFETY USE REQUIREMENTS. REFER TO THE CALIFORNIA CODE OF REGULATIONS, TITLE 3, SECTION 6793.

BROMOXYNIL (BUCTRIL, BRONATE)

FOLPET

OXYDEMETON-METHYL (METASYSTOX-R)

PROPARGITE (OMITE, OMITE CR, COMITE)

EXEMPTIONS

- FOLPET - WHEN CONTAINED IN OR ADDED TO PAINTS, COATINGS, OR CAULKING COMPOUNDS

CONDITIONS OF USE

- OXYDEMETON-METHYL TO LANDSCAPE TREES AND SHRUBS - TRUNK INJECTION OR SOIL INJECTION METHODS ONLY
- OXYDEMETON-METHYL SHALL NOT BE APPLIED WITHIN A GREENHOUSE
- PROPARGITE SHALL NOT BE APPLIED WITHIN A GREENHOUSE

MINIMAL EXPOSURE PESTICIDES SAFETY USE REQUIREMENTS

- The employer shall provide a clothing change area and instructions, as required by section 6732, for employees handling minimal exposure pesticides for any period of time, regardless of the product's toxicity category.
- The employer shall provide washing facilities, as specified in section 6734, where minimal exposure pesticides are mixed or loaded, regardless of the product's toxicity category.
- The employer shall provide and maintain work clothing, as specified in section 6736, and require it to be worn, regardless of the toxicity category.
- The employer shall provide a closed system, as defined in section 6000.4, and require its use by all employees who mix, load or transfer liquid formulations or load diluted liquid mixes derived from dry formulations of minimal exposure pesticides, regardless of the product's toxicity category. The requirements of this subsection do not apply to the following:
  - Employees who handle a total of one gallon or less of these pesticides per day exclusively in original containers of one gallon or less.
  - Regulatory personnel collecting samples of these pesticides according to official sampling procedures.
- The employer shall provide and require employees to wear full body chemical resistant protective clothing, as specified in section 6738(d), when handling minimal exposure pesticides. Employees working in the following situations are not required by this subsection to wear chemical resistant full body protective clothing, but this clothing shall be present at the work site:
  - Employees using a closed system, or sealed water soluble packets, while mixing, loading or transferring these pesticides. These employees shall wear a chemical resistant apron, chemical resistant gloves and chemical resistant boots.
  - Employees working as applicators in enclosed cabs.
  - Employees working as flaggers in enclosed vehicles.
  - Applicators using vehicle mounted or towed equipment to inject or incorporate these pesticides into the soil.
  - Applicators using equipment with vehicle mounted spray nozzles directed downward and located below the level of the employee.
- The employer shall provide and require employees to wear respiratory protection, as specified in section 6738(e), when engaged in:
  - Hand application or ground application of minimal exposure pesticides, except:
    - Applicators using vehicle mounted or towed equipment to inject or incorporate these pesticides into the soil.
    - Applicators using equipment with vehicle mounted spray nozzles directed downward and located below the level of the employee.
  - Flagging during an application of a minimal exposure pesticide, except flaggers in enclosed vehicles.
  - Mixing or loading dry formulations of minimal exposure pesticides, except mixers or loaders using sealed water soluble packets.
- All protective clothing shall be cleaned inside and out or discarded at the end of the day's use.

For more information, contact your county agricultural commissioner's office.

(4/95)

County Agricultural Commissioners Directory

As of September 1, 1995

COUNTY	COMMISSIONER	ADDRESS	TELEPHONE	FAX
Alameda	[redacted]	224 W. Winton Ave. Rm. 184 Hayward, 94544 HOURS: M-F, 8:30-4:30	[redacted]	[redacted]
Alpine (see El Dorado)				
Amador	[redacted]	Amador County Airport Bldg. Sutter Hill 108 Court St. (Mail) Jackson, 95642 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Butte	[redacted]	316 Nelson Avenue Oroville, 95965-3318 HOURS: M-F, 8:30-4:30	[redacted]	[redacted]
Calaveras	[redacted]	County Government Center 891 Mountain Ranch Road San Andreas, 95249-9709 HOURS: M-F, 8:00-12:00	[redacted]	[redacted]
Colusa	[redacted]	100 Sunrise Blvd., Suite F Colusa, 95932-1029 HOURS: M-F, 8:30-5:00	[redacted]	[redacted]
Contra Costa	[redacted]	2366 "A" Stanwell Circle Concord, 94520-4804 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Del Norte	[redacted]	2650 Washington Blvd. Crescent City, 95531-8627 HOURS: M-F, 9:00-5:00	[redacted]	[redacted]
El Dorado/Alpine	[redacted]	311 Fair Lane Placerville, 95667-4195 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Fresno	[redacted]	1730 S. Maple Avenue Fresno, 93702-4596 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Glenn	[redacted]	720 N. Colusa Street P.O. Box 351 Willows, 95988 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Humboldt	[redacted]	5630 S. Broadway Eureka, 95503-6998 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]

** Manual FAX Machine.

COUNTY	COMMISSIONER	ADDRESS	TELEPHONE	FAX
Imperial	[redacted]	150 South 9th Street El Centro, 92243-2850 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Inyo/Mono	[redacted]	County Services Building 207 W. South Street Bishop, 93514-3492 HOURS: M-F, 8:00-4:00	[redacted]	[redacted]
Kern	[redacted]	1001 S. Mount Vernon Ave. Bakersfield, 93307-2857 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Kings	[redacted]	680 N. Campus Dr., Ste. B Hanford, 93230-5923 HOURS: M-F. 8:00-5:00	[redacted] EXT. 2830	[redacted]
Lake	[redacted]	883 Lakeport Blvd. Lakeport, 95453 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Lassen	[redacted]	175 Russell Avenue Susanville, 96130-4299 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Los Angeles	[redacted]	3400 La Madera Avenue El Monte, 91732-2696 HOURS: M-TH, 7:00-5:30	[redacted]	[redacted]
Madera	[redacted] (Acting)	332 Madera Avenue Madera, 93637-5431 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Marin	[redacted]	1682 Novato Blvd., 150-A Novato, 94947-7021 HOURS: M-F, 9:00-3:00	[redacted]	[redacted]
Mariposa	[redacted]	5009 Fairgrounds Road P. O. Box 905 Mariposa, 95338-0905 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Mendocino	[redacted]	579 Low Gap Road Court House Ukiah, 95482-3745 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Merced	[redacted]	2139 Wardrobe Avenue Merced, 95340-6495 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Modoc	[redacted]	202 West 4th Street Alturas, 96101-3915 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Mono (see Inyo)				

COUNTY	COMMISSIONER	ADDRESS	TELEPHONE	FAX
Monterey	[redacted]	1428 Abbott St. Salinas, 93901 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Napa	[redacted]	1710 Soscol Ave., Suite [redacted] Napa, 94559-1315 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Nevada	[redacted]	Veterans Memorial Bldg. 255 S. Auburn Street Grass Valley, 95945-7289 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Orange	[redacted]	1010 S. Harbor Blvd. Anaheim, 92805-5597 HOURS: M-TH, 7:30-5:30 (Closed every other Friday)	[redacted]	[redacted]
Placer	[redacted]	11477 East Avenue Auburn, 95603-2799 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Plumas/Sierra	[redacted]	208 Fairgrounds Road Quincy, 95971-9462 HOURS: M-TH, 7:30-5:00 HOURS: F, 8:00-5:00 (Closed every other Friday)	[redacted]	[redacted]
Riverside	[redacted]	4080 Lemon St., Room 19 P.O. Box 1089 Riverside, 92502-1089 HOURS: M-F, 8:00-5:00 Closed Every Other Friday	[redacted]	[redacted]
Sacramento	[redacted]	4137 Branch Center Road Sacramento, 95827-3897 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
San Benito	[redacted]	3220 Southside Road P.O. Box 699 Hollister, 95024-0699 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
San Bernardino	[redacted]	777 E. Rialto Avenue San Bernardino, 92415-0720 HOURS: M-F, 7:30-5:00	[redacted]	[redacted]
San Diego	[redacted]	5555 Overland Ave., Bldg. [redacted] San Diego, 92123-1292 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
San Francisco	[redacted]	501 Cesar Chavez St., Ste. 109-A San Francisco, 94124-1209 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]

COUNTY	COMMISSIONER	ADDRESS	TELEPHONE	FAX
San Joaquin	[redacted]	1868 East Hazelton Avenue P.O. Box 1809 Stockton, 95201-1809 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
San Luis Obispo	[redacted]	2156 Sierra Way, Suite A San Luis Obispo, 93401-4556 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
San Mateo	[redacted]	Agriculture Building 728 Heller Street P.O. Box 999 Redwood City, 94064-0999 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Santa Barbara	[redacted]	263 Camino del Remedio Santa Barbara, 93110-1335 HOURS: M-F, 8:00-4:30	[redacted]	[redacted]
Santa Clara	[redacted]	1553 Berger Drive, Bldg. [redacted] San Jose, 95112-2795 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Santa Cruz	[redacted]	175 Westridge Drive Watsonville, 95076-2797 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Shasta	[redacted]	3179 Bechelli Lane, Ste. 210 Redding, 96002-2041 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Sierra (See Plumas)				
Siskiyou	[redacted]	525 South Foothill Drive Yreka, 96097-3090 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Solano	[redacted]	2000 West Texas Street Fairfield, 94533-4497 HOURS: M-F, 8:30-5:00	[redacted]	[redacted]
Sonoma	[redacted]	2604 Ventura Ave., Rm. 101 Santa Rosa, 95403-2893 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Stanislaus	[redacted]	725 County Center Three Ct. Modesto, 95355-4492 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Sutter	(VACANT)	142 Garden Highway Yuba City, 95991-5512 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]

COUNTY	COMMISSIONER	ADDRESS	TELEPHONE	FAX
Tehama	[redacted]	1760 Walnut Street P.O. Box 38 Red Bluff, 96080 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Trinity	[redacted]	Civil Defense Hall Basement Box 1466 Weaverville, 96093-1466 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Tulare	[redacted]	Agriculture Building 2500 West Burrel Avenue Visalia, 93291-4584 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Tuolumne	[redacted]	22365 S. Airport Rd., Columbia 2 South Green Street (Mail) Sonora, 95370-4617 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Ventura	[redacted]	Agriculture Building 815 Santa Barbara Street P.O. Box 889 Santa Paula, 93061-0889 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Yolo	[redacted]	70 Cottonwood Street Woodland, 95695-2593 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Yuba	[redacted]	938 14th Street Marysville, 95901-4192 HOURS: M-TH. 7:00-6:00	[redacted]	[redacted]

SEALERS OF WEIGHTS & MEASURES*

COUNTY	SEALER	ADDRESS	TELEPHONE	FAX
Alameda	[redacted]	333 5th Street Oakland, 94607 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Kern	[redacted]	1116 E. California Avenue Bakersfield, 93307 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Monterey	[redacted]	1428 Abbott Street Salinas, 93901 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Napa	(VACANT)	7292 Silverado Trail Napa, 94558 HOURS: M-F, 8:00-5:00	[redacted]	[redacted]
Riverside	[redacted]	2950 Washington Street P.O. Box 1480 Riverside, 92501-1480 HOURS: M-F, 7:30-5:00 (Closed every other Friday)	[redacted]	[redacted]
Ventura	[redacted]	800 S. Victoria Avenue Ventura, 93309 HOURS: M-TH, 7:00-5:30	[redacted]	[redacted]

* The Agricultural Commissioner also serves as the Sealer of Weights & Measures EXCEPT in the counties listed above.

Cooperative Extension Office Addresses

Agricultural Information and Publications

University of California
University Services Bldg., Room [redacted]
[redacted] Research Park Drive
Davis, CA 95616
[redacted]

ANR Publications

University of California
6701 San Pablo Avenue
Oakland, CA 94608-1239
[redacted]

Two new ways to order publications:
- Within California, call **TOLL FREE,** [redacted] weekdays from 8 AM - 5 PM
- Use the Internet to e-mail your request to: [redacted]

County Headquarters Offices:

County	Address	Telephone
Alameda	224 West Winton Avenue, Room 174 Hayward, CA 94544-1298	[redacted]
Amador*	Location: 12380 Airport Road Martell Mailing: 108 Court Street Jackson, CA 95642	[redacted]
Butte*	2279 Del Oro Avenue, Suite B Oroville, CA 95965	[redacted]
Calaveras*	891 Mountain Ranch Road County Annex Calaveras, CA 95249-9709	[redacted]
Colusa*	Location: 100 Sunrise Boulevard, Suite E Colusa Mailing: P.O. Box 180 Colusa, CA 95932	[redacted]
Contra Costa	1700 Oak Park Boulevard Building A-2 Pleasant Hill, CA 94523	[redacted]
Del Norte	Courthouse Annex 981 H Street Crescent City, CA 95531	[redacted]
El Dorado*	311 Fair Lane Placerville, CA 95667	[redacted]
Fresno*	1720 South Maple Avenue Fresno, CA 93702	[redacted]
Glenn*	Location: County Road 200 East Orland Mailing: P.O. Box 697 Orland, CA 95963	[redacted]
Humboldt	Agricultural Center Building 5630 South Broadway Eureka, CA 95503-6999	[redacted]

County	Address	Telephone
Imperial	1050 East Holton Road Holtville, CA 92250-9615	[redacted]
Inyo-Mono	207 West South Street Bishop, CA 93514	[redacted]
Kern*	1031 South Mount Vernon Avenue Bakersfield, CA 93307-2509	[redacted]
Kings*	Location: Kings County Agricultural Center Hanford Mailing: 680 North Campus Drive Hanford, CA 93230	[redacted] Extension 2730 or 2732
Lake*	Agricultural Center 883 Lakeport Boulevard Lakeport, CA 95453	[redacted]
Lassen	1205 Main Street Memorial Building Susanville, CA 96130	[redacted]
Los Angeles	2615 South Grand Avenue, Suite 400 Los Angeles, CA 90007	[redacted] -4864, or -4866
Madera*	328 Madera Avenue Madera, CA 93637	[redacted]
Marin*	1682 Novato Boulevard, Suite 150-B Novato, CA 94947	[redacted]
Mariposa*	5009 Fairgrounds Road Mariposa, CA 95338-9435	[redacted]
Mendocino*	Location: 579 Low Gap Road Ukiah Mailing: Agricultural Center/Courthouse Ukiah, CA 95482	[redacted]
Merced*	2145 West Wardrobe Avenue Merced, CA 95340	[redacted]
Modoc	202 West 4th Street Alturas, CA 96101	[redacted] Extension 400
Mono	(See Inyo-Mono counties listing)	
Monterey*	1432 Abbott Street Salinas, CA 93901	[redacted]
Napa*	1710 Soscal Avenue, Suite [redacted] Napa, CA 94559-1315	[redacted]
Nevada*	Veterans Memorial Building 255 South Auburn Street Grass Valley, CA 95945	[redacted]

County	Address	Telephone
Orange*	1045 Arlington Drive Costa Mesa, CA 92626	[redacted]
Placer*	11477 E Avenue Auburn, CA 95603	[redacted]
Plumas-Sierra*	208 Fairground Road Quincy, CA 95971	[redacted]
Riverside*	21150 Box Springs Road Moreno Valley, CA 92387	[redacted]
Sacramento*	4145 Branch Center Road Sacramento, CA 95827	[redacted]
San Benito*	649-A San Benito Street Hollister, CA 95023	[redacted]
San Bernardino*	777 East Rialto Avenue San Bernardino, CA 92415-0730	[redacted]
San Diego*	5555 Overland Avenue Building 4 San Diego, CA 92123	[redacted]
San Francisco	Mailing: 300 Piedmont Avenue Building C, Room 305A San Bruno, CA 94066	[redacted]
San Joaquin*	420 South Wilson Way Stockton, CA 95205	[redacted]
San Luis Obispo*	2156 Sierra Way, Suite C San Luis Obispo, CA 93401	[redacted]
San Mateo	625 Miramontes Street, Suite 200 Half Moon Bay, CA 94019	[redacted]
Santa Barbara*	105 East Anapamu, Suite [redacted] Santa Barbara, CA 93101	[redacted]
Santa Clara*	68 North Winchester Boulevard Santa Clara, CA 95050	[redacted]
Santa Cruz*	1432 Freedom Boulevard Watsonville, CA 95076-2796	[redacted]
Shasta*	3179 Bechelli Lane, Suite 206 Redding, CA 96002	[redacted]
Sierra	(See Plumas-Sierra counties listing)	
Siskiyou*	1655 South Main Street Yreka, CA 96097	[redacted]

County	Address	Telephone
Solano*	2000 West Texas Street Fairfield, CA 94533-4498	[redacted]
Sonoma*	2604 Ventura Avenue, Room 100-P Santa Rosa, CA 95403-2894	[redacted]
Stanislaus*	Location: Scenic Drive & Oakdale Road Modesto Mailing: 733 County Center III Court Modesto, CA 95355	[redacted]
Sutter-Yuba*	142-A Garden Highway Yuba City, CA 95991	[redacted]
Tehama*	Location: 1754 Walnut Street Red Bluff Mailing: P.O. Box 370 Red Bluff, CA 96080	[redacted]
Trinity*	Location: County Fairgrounds Hayfork Mailing: P.O. Box 490 Hayfork, CA 96041	[redacted]
Tulare*	Location: 2500 West Burrel Avenue Visalia Mailing: Agriculture Building County Civic Center Visalia, CA 93291	[redacted]
Tuolumne*	Location: 52 North Washington Street Sonora Mailing: 2 South Green Street Sonora, CA 95370	[redacted]
Ventura	702 County Square Drive Ventura, CA 93003-5404	[redacted]
Yolo*	70 Cottonwood Street Woodland, CA 95695	[redacted]
Yuba	(See Sutter-Yuba counties listing)	

DEPARTMENT OF PESTICIDE REGULATION

1020 N Street, Sacramento, California 95814-5624

Telephone and Room Numbers

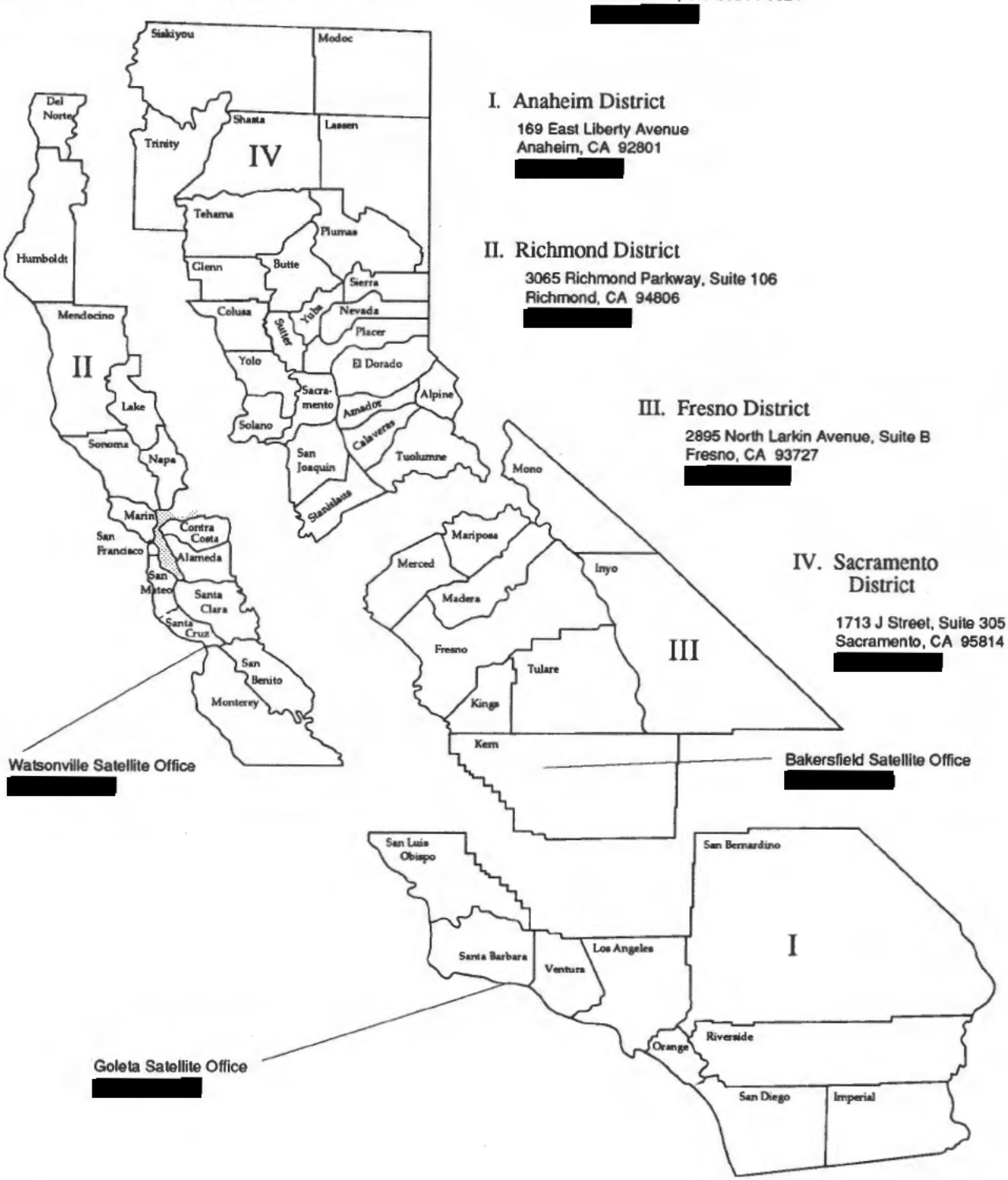
NOTE: Telephone numbers are all 916 area code.

Executive Office Room 100 Information: [redacted]	
Administrative Services Division Room 129 Information: [redacted]	
Legal Office Room 100 Information: [redacted]	
Division of Enforcement, Environmental Monitoring, & Data Management Room 100 Information: [redacted]	**Division of Registration and Health Evaluation** Room 100 Information: [redacted]
Pesticide Enforcement Branch Room 300 Information: [redacted]	**Medical Toxicology Branch** Room 234 Information: [redacted]
Environmental Monitoring Branch Room 161 Information: [redacted]	**Worker Health and Safety Branch** Room 200 Information: [redacted]
Information Systems Branch Room 322 Information: [redacted]	**Registration Branch** Room 332 Information: [redacted]
	Registration Ombudsman Room 332 Information: [redacted]

State of California
Department of Pesticide Regulation
Pesticide Enforcement Branch
Headquarters and District Offices

Sacramento Headquarters

1020 N Street, Room 300
Sacramento, CA 95814-5624
[redacted]



I. Anaheim District

169 East Liberty Avenue
Anaheim, CA 92801
[redacted]

II. Richmond District

3065 Richmond Parkway, Suite 106
Richmond, CA 94806
[redacted]

III. Fresno District

2895 North Larkin Avenue, Suite B
Fresno, CA 93727
[redacted]

IV. Sacramento District

1713 J Street, Suite 305
Sacramento, CA 95814
[redacted]

Watsonville Satellite Office
[redacted]

Bakersfield Satellite Office
[redacted]

Goleta Satellite Office
[redacted]

(10/95)

GLOSSARY OF TERMS

agricultural commodity. An unprocessed product of farms, ranches, nurseries and forests (except livestock, poultry and fish). Agricultural commodity includes fruits and vegetables; grains, i.e., wheat, barley, oats, rye, triticale, rice, corn and sorghum; legumes, i.e., field beans and peas; animal feed and forage crops; rangeland and pasture; seed crops; fiber crops, i.e., cotton; oil crops, i.e., safflower, sunflower, corn, and cottonseed; trees grown for lumber and wood product; nurse stock grown commercially; Christmas trees; ornamentals and cut flowers; and turf grown commercially for sod.

agricultural pest control adviser. A person who offers a recommendation on any agricultural use, who holds himself/herself as an authority on any agricultural use, or who solicits services or sales for any agricultural use.

agricultural use. The use of any pesticide or method or device for the control of plant or animal pests, or any other pests, or the use of any pesticide for the regulation of plant growth or defoliation of plants. It excludes the sale or use of pesticides in properly labeled packages or containers which are intended for any of the following:

1. Home use.
2. Use by structural pest control operators.
3. Industrial or institutional use.
4. Use under a veterinarian's prescription (animal pest only).
5. Uses by certain local districts or agencies that operate under a cooperative agreement with the California Department of Health Services, as is the case with many mosquito abatement districts.

"Agricultural use" includes, but is not limited to, commercial production of animals or plants (including forest), parks, golf courses, cemeteries, roadsides, power line right-of-way, and nurseries. Schoolyards are not included within the definition of agricultural use.

apiary. Includes bees, comb, hives, appliances, or colonies, wherever they are kept, located, or found.

authorized representative. An employee of the person responsible for making decisions regarding the general operation of the property, or a licensed agricultural

pest control adviser who has written authorization from such person to act in his or her behalf.

bees. Honey-producing insects of the genus Apis. It includes all life stages of these insects.

carbamates. Esters of N-methyl carbamic acid which inhibit cholinesterase. Example of carbamates are Sevin®, Carzol®, Ficam®, Furadan®, Lannate® and Temik®.

certified commercial applicator. (a) A current authorized agent (Qualified Applicator License holder) on a Pest Control License issued by the Director; (b) a pilot holding a valid Journeyman Certificate issued by the Director; (c) a person holding a Certified Technician Certificate issued by the Environmental Management Branch, Division of Environmental Health, of the Department of Health Services; (d) a person holding a valid Structural Pest Control Operator or Field Representative license issued by the Structural Pest Control Board of the Department of Consumer Affairs; (e) a person holding a valid Qualified Applicator Certificate issued by the Director.

certified private applicator. A private applicator holding a valid Restricted Material Permit.

chromosomal abberrations. Any abnormal development of the chromosomes.

closed system. A procedure for removing a pesticide from its original container, rinsing the emptied container and transferring the pesticide product, mixture and dilutions and rinse solution through connecting hoses, pipes and couplings that are sufficiently tight to prevent exposure of any person to the pesticide or rinse solution. Rinsing is not required when the pesticide is used without dilution. The system's design and construction must meet the Director's closed system criteria.

commercial applicator. A person who uses or supervises the use of a restricted material for any purpose or on any property other than as provided by the definition of "private applicator."

commissioner. A county agricultural commissioner.

continuous monitoring. The measurement of the air concentration of a specific pesticide on an uninterrupted, real-time basis by instrumental methods.

county. This includes the city and county.

crop sheet. Crop sheets are developed by the Department of Pesticide Regulation and are written in English and Spanish. The crop sheet contains the following

information:

1. A list of pesticides commonly applied to the crop;
2. The month or season of year each pesticide is typically applied to the crop;
3. Information concerning possible human health hazards from pesticides;
4. Information concerning protective work procedures and clothing required by regulation or labeling;
5. A list of symptoms of poisoning from pesticides; and
6. Information concerning treatment for pesticide poisoning or injury.

Department. The Department of Pesticide Regulation.

Director. The Director of the Department of Pesticide Regulation.

DNA. Deoxyribonucleic acid. DNA is found in the nucleus of all living cells; when bound together, DNA determines an individual's hereditary characteristics.

economic poison. Includes any of the following:

(a) Any spray adjuvant.
(b) Any substance, or mixture of substances, which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest which may infest or be detrimental to vegetation, man, animals, or households, or be present in any agricultural or nonagricultural environment whatsoever.

employee. Any person hired by the employer or his agent; agent may include a labor contractor. All persons under a corporation are employees.

employer. Any person who hires an employee and may include: the operator of the property, a labor contractor, a pest control operator, any other contractor, or the employer's agent.

enclosed cab. An enclosure made of any combination of metal, glass, plastic or other materials that prevents pesticide spray, dust, leaves or branches from contacting the employeee.

field. Any area (including a greenhouse) upon which one or more crops are commercially grown.

FIFRA. This is the acronym for the "Federal Insecticide, Fungicide and Rodenticide Act" -- the federal law governing the registration, sale, possession and use of pesticides.

food. Any article which is used for food or drink for human or any other animal, or for a component of any such article.

ground water protection advisory. A written statement containing advice for the use of a pesticide containing a chemical listed in Section 6800(a) in its respective Pesticide Management Zone(s) and includes the following:

(1) Name and address of the owner or operator of the property to be treated;
(2) Location of each property to be treated, including the designation by base, meridian, township, range and section;
(3) The base soil textural class for each site on the property to be treated.
(4) A map of the property to be treated, identifying all known areas that could impact the movement of the chemical to ground water, including but not limted to, abandoned and surface drainage (dry) wells, and irrigation and domestic wells;
(5) The conditions for the property to be treated in relation to basic soil textural class, irrigation practices, and the location of wells, including but not limited to, abandoned and surface drainage (dry), irrigation and domestic, to minimize the movement of the chemical to ground water;
(6) The signature and address of the agricultural pest control adviser writing the advisory and the date and number of the agricultural pest control adviser's license.

This information listed above does not meet the requirements of a written recommendtion.

handle. Includes mixing, loading, applying (including flagging) pesticides, or maintaining, servicing, repairing, or cleaning contaminated equipment used in these activities.

home use. Use in a household or its immediate environment.

industrial use. The use of pesticides for or in manufacturing, mining or chemical process, or use in the operation of factories, processing plants, and similar sites.

institutional use. The use of pesticides within the confines of, or on property necessary for the operation of buildings including hospitals, schools, libraries, auditoriums, and office complexes.

laws. Are statutes passed by the California Legislature and signed by the Governor. Pesticide and pest control laws are found in the California Food and Agricultural Code.

LC_{50}. The lethal concentration of active ingredient in air or water that will kill 50% of the test animals. LC_{50} is usually expressed in micrograms (1/1,000,000g) per liter of air or water (µg/ml). LC_{50} is used to measure acute inhalation toxicity.

LD_{50}. The lethal concentration of active ingredient that will kill 50% of a large population of test animals. LD_{50} is usually expressed as the milligram (mg) of pesticide per kilogram (kg) of body weight of test animals. LD_{50} is used to measure oral toxicity and acute dermal toxicity.

medical supervision. Is occupational health guidance and necessary associated health evaluation by a physician licensed to practice medicine.

mitigation measure. A condition attached to the approval of an activity which if implemented would substantially reduce any adverse impact, taking into account economic, environmental, social, and technological factors and timeliness of control.

mutagenic. The property of a substance or mixture of substances to induce changes in the genetic complement of either somatic or germinal tissue in subsequent generations.

neurotoxic. Any adverse effect on the nervous system such as delayed-onset locomotor atazia resulting from single administration of the test substance, repeated once if necessary.

notice of intent. A oral or written notification to the commissioner, as specified by the commissioner, prior to the use of a pesticide pursuant to a permit.

nuisance. Any lot of produce which is found to carry pesticide residue in excess of any maximum, or in excess of a permissible tolerance, together with its containers, is a public nuisance.

oncogenic. The property of a substance, or a mixture of substances, to produce or induce benign or malignant tumor formations in living animals.

operator of the property. The person primarily responsible for the control or management of the property.

organophosphates. Organophosphorus esters which inhibit cholinesterase. Examples of organophosphates are diazinon, ethion, Guthion®, parathion, Phosdrin®, and Thimet®.

parts per million (ppm). The number of parts of toxicant per million parts of the subject in question. They may include residues in soil, water, air, fruits and vegetables, and whole animals.

permissible exposure limit (PEL). The permitted maximum exposure to an airborne contaminant in an 8-hour workday.

person. Includes firm, corporation, company, or association.

pest control dealer. Is any person, including any manufacturer, distributor, or retailer who engages in any of the following business activities:

(a) Selling pesticides to users for an agricultural use.

(b) Selling to users any method or device for the control of agricultural pests, such as biological agents, lures, or insect-trapping devices.
(c) Soliciting sales of pesticides by making agricultural use recommendations through field representatives, or other agents.
(d) Selling to a user a pesticide classified as a restricted material that requires either a permit for possession and use or which may be used only by or under the direct supervision of a certified applicator.

pesticide. Any substance, or mixture of substances, as defined in the term "economic poison" and includes mixtures and dilutions of pesticides. Insecticides, fungicides, disinfectants, rodenticides, herbicides, algicides, fumigants, spray adjuvants, and growth regulators are some of the many kinds of pesticides.

pesticide chemical. Any substance that is used in the production, storage, or transportation of produce which is an "economic poison."

pesticide management zone (PMZ). A geographical area of approximately one square mile which is sensitive to ground water pollution and which corresponds to a section as defined by base, meridian, township, range and section, or which is defined by latitude and longitude, or other generally accepted geographical coordinates.

pesticide residue. The remnant of a pesticide or degradation product that can be found on or in a crop or commodity after an application, or from other exposure to the pesticide chemical. Residues are usually expressed in parts per million (ppm) or in parts per billion (ppb) on a weight basis.

Pesticide Safety Information Series (PSIS). A series of leaflets that summarize health and safety aspects of various pesticides and groups of pesticides.

phytotoxic. A substance or mixtures of substances which is capable of causing injury to plants.

pollution. For the purposes of this study guide, pollution is the introduction into the ground waters of the State of an active ingredient, other specified product, or degradation product of an active ingredient of an economic poison above a level, with an adequate margin of safety, that does not cause adverse health effects.

preharvest interval. A period of time after an application of a pesticide to a crop, during which harvest is prohibited so the crop will meet the established pesticide

residue tolerance.

private applicator. (a) A person who uses or supervises the use of a restricted material for the purpose of producing an agricultural commodity on property owned or rented by him/her or his/her employer; or (b) a householder who uses or supervises the use of a restricted material, outside the confines of a residential dwelling for the purpose of controlling ornamental plant or turf pests on residential property owned or rented by such householder; or (c) a householder who uses or supervises the use of a restricted material (not including Federally restricted pesticides) within the confines of a residential dwelling owned or rented by such householder.

produce. Any food in its raw or natural state which is in such form as to indicate that it is intended for consumer use with or without any further processing.

producing an agricultural commodity. The growing of a crop, including harvesting, up to the point where further pesticide applications would be considered industrial use, such as packing house applications or fumigations at the packer/ shipper facility.

protective clothing. Clothing which minimizes human body contact with a pesticide and is separate from or in addition to normal wearing apparel. Protective clothing may include, work clothing, chemical resistant boots, gloves, a hat, and chemical resistant apron.

recommendation. The giving of any instruction or advice on any agricultural use as to any particular application on any particular piece of property.

reentry interval. The period of time after a field is treated with a pesticide during which restrictions on entry are in effect to protect employees from potential exposure to hazardous levels of residue.

registrant. A person who has registered an economic poison by obtaining a certificate of registration from the Department.

regularly handle. Is when an employee is handling pesticides during any part of the day for more than six calendar days in any 30 consecutive day qualifying period beginning on the first day of handling. Any day spent mixing or loading pesticides while exclusively using a closed system or mixing only pesticides sealed in water-soluble packets, is not included for any employee who has a baseline blood cholinesterase level established.

regulations. Adopted by the Director of Department of Pesticide Regulation after a public comment period and a hearing, approval by the Office of Administrative Law,

and filed with the Secretary of State. Regulations are designed to interpret and carry out the purposes of the law. Regulations are found in Title 3 and Title 26 of the California Code of Regulations.

County agricultural commissioners may adopt regulations governing local pest control operations. These county regulations must be approved by the Director of the Department of Pesticide Regulation before they become effective.

restricted materials hazards chart. A chart developed by the Department that specifies the degree of potential hazard for each restricted material to public and occupational health, adverse impact on pest management systems, users of restricted materials, farmworkers, bees, nontarget plants, fish and wildlife, and other parts of the environment.

Section 3. A section of the law in FIFRA governing the registration of pesticides.

Section 18. A pesticide used under an emergency exemption and is automatically considered a restricted material. A Restricted Materials Permit is required for its use. The pesticide must be used in compliance with all Section 18 requirements, including rate, concentration, and target pest. Section 18s are exemptions from labeling, and therefore, are not allowed the deviations from label requirements granted in California Code of Regulations Section 6000.

site specific. A pesticide permit that identifies the specific area to be treated, the size of that area, and the commodity(ies) or site(s) on that area to be treated.

spray adjuvant. Any wetting agent, spreading agent, deposit builder, adhesive, emulsifying agent, deflocculating agent, water modifier, or similar agent, with or without toxic properties of its own, which is intended to be used with another economic poison as an aid to the application or effect of the other economic poison, and sold in a package that is separate from that of the economic poison other than a spray adjuvant with which it is to be used.

teratogenic. The property of a substance or mixture of substances to produce or induce functional deviations or developmental anomalies, not heritable, in or on an animal embryo or fetus.

time specific. A pesticide permit that specifies the date the intended application is to commence or a permit with a notice of intent requirement. The pesticide use may commence within four days following such date if delays are caused by uncontrollable conditions such as adverse weather or unavailability of equipment. The commissioner must require a Notice of Intent from either the grower, the grower's authorized representative, or the pest control operator when necessary to

make the permit time and site specific.

tolerance. The established amount, in parts per million or parts per billion, of a pesticide that may legally and safely remain in or on any food or crop at the time of sale if they are to be consumed by people or livestock. Tolerances are established by the U.S. Environmental Protection Agency.

Toxicity Category I. Pesticide products which are required to prominently display the signal word "DANGER" on the pesticide label.

Toxicity Category II. Pesticide products which are required to prominently display the signal word "WARNING" on the pesticide label.

Toxicity Category III. Pesticide products which are required to prominently display the signal word "CAUTION" on the pesticide label.

treated field. A field treated with a pesticide in the production of an agricultural commodity during the current use season.

use-dilution. A dilution specified on the label or labeling which produces the concentration of the economic poison for a particular purpose or effect.

work clothing. A long-sleeved shirt and long-legged trouser or coverall type garment, all of closely woven fabric or equivalent, covering the body, including arms and legs. The clothing need not cover the head, hands, or feet.

workplace. The identity of the work area, e.g., the business operation or employer's headquarters.

worksite. The location of the work activity, e.g., mix/load site, field, etc.